One More Paper of Cs401
1.two types of call?
2.Replace the following invalid instruction with the single valid instruction
a. (a)mov IP
b. (b)mov IP,L5
3.How 16-bit operations is different from 32-bit operation?
4.a program of subroutine with array(bubble sort) ?
5.write two prefixes for CMPS?
6.which instructions are used for insert and retrieve data from stack
?

My Today's cs 401 paper Faza Noor
All MCQs were from past papers.
Subjective part:
Q1. what does the following instruction do? 2 marks
xor di, di
Q2. write the procedure for clearing selective bit. 2 marks
Q3. Differentiate between REPE and REPNE. With which instruction these both prefixes are used? 3 marks
Q4. Which instructions in assembly language are used for temporarily diversion and permanent diversion? 3 marks
Q5. write prefixes for CMPS and write the reason to use them. 5 marks
Q6. what shifting operation we use for 16-bit multiplication by 2 and why? 5 marks

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otal 40 marks
20 mcqs(70% from past papers)
6 questions
Describe the bitwise logical operations…2marks
Describe the PUSH Instruction…3 marks
From where does the contents of SL and DS registers are loaded as a result of execution of the instruction of the instruction" LDS SL [BP +4]"? (2 marks)

How 16-bit DIV operations is different from 32-bit DIV operation?
3marks

Explain the complete operation of Interrupt when it is generated.
5marks

Consider the following pseudo-code and the write the corresponding
assembly code
for it. Note: There is more credit for a shorter code. 5 marks

If (al> Cl) AND (bl > al)

{
dx = 1
}

CS401 TODAY PAPER
Half mcqs from past papers
Q1:how 16 bit DIV is different from 32-bit DIV? 2masrks
Q2: give the syntax of mov PUSH stack with the help of an example? 2 marks
Q3:Stack is working like LIFO discuss? 3 marks
Q4:give the working of string instructions on the block code of stack? Marks 3
Q5: write the code of call bubble sort subroutine to pass parameter on the stack? 5 marks

Q6:write the algorithm to write numbers in the assembly language programming? 5 marks

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MIDTERM FALL 2010
CS401
28-11-2011 by Jawad

Question No: (Marks: 1) - Please choose one
The first instruction of "COM" file must be at offset:
► 0x0010
► 0x0100
► 0x1000
► 0x0000

Question No: (Marks: 1) - Please choose one
In a video memory, each screen location corresponds to
► One byte
► Two bytes
► Four bytes
► Eight bytes

Question No: (Marks: 1) - Please choose one
The execution of the instruction "mov word [ES : 0], 0x0741" will print character "A" on screen , background color of the screen will be
► Black
► White
► Red
► Blue

Question No: (M a r k s: 1)
The physical address of the stack is obtained by

► SS:SI combination
► SS:SP combination
► ES:BP combination
► ES:SP combination

Question No: (M a r k s: 1)
After the execution of POP instruction
► SP is incremented by 2
► SP is decremented by 2
► SP is incremented by 1
► SP is decremented by 1

Question No: (M a r k s: 1)
Which mathematical operation is dominant during the execution of SCAS instruction
► Division
► Multiplication
► Addition
► Subtraction

Question No: (M a r k s: 1)
The iAPX888 architecture consists of _____ register.
- 12
- 14
- 16
- 18

Question No:

MOV instruction transfers a byte or word from which of the following source location.

- DS:DI
- ES:SI
- ES:DI
- DS:SI

Question No:
The execution of the instruction "mov word [ES: 0], 0x0741" will print "A" on the screen, color of the character will be

- Black
- White
- Red
- Blue

Question No:
One screen location corresponds to a
Byte
Word
Double byte
Double word

Question No:
When an item is pushed on the decrementing stack, the top of the stack is
First decremented and then element copied on to the stack
First incremented and then element copied on to the stack
Decremented after the element copied on to the stack
Incremented after the element copied on to the stack

Question No:
Each screen location corresponds to a word, the lower byte of this word contains _____
The character code
The attribute byte
The parameters
The dimensions

Question No:
In a video memory, each screen location corresponds to
One byte
Two bytes
Four bytes
Eight bytes

Question No:
Foreground and background parameter will be

- 32bits
- 16bits
- **8bits**
- 4bits

Q1:- what is pop instruction 3 marks
Q2:- number algorithm code 5 marks
Q3:- which situation we use ADD instruction carry 5 marks
Q4:- how video device viewed by processor 3 marks

MY TODAYS PAPER CS401
10 dec 2012 at 11.00 am
MCQS

he second byte in the word designated for screen location holds
o The dimension of the screen
o Character position on the screen
o Character color on the screen
o ACSII code of the character

The extended ASCII code are
o 64 characters
o 128 characters
o 256 characters
o 502 characters

The execution of the instruction "mov word [ES: 0], 0x0741" will print "A" on the screen, color of the character will be
►Black
►**White**
►Red
►Blue

Code Segment is associated to _____ register by default.
o IP
o SS
o BP
o CX

The physical address of the stack is obtained by
►SS:SI combination
►**SS:SP combination**
►ES:BP combination
►ES:SP combination

In 8088 architecture, whenever an element is pushed on the stack
► SP is decremented by 1
► **SP is decremented by 2**
► SP is decremented by 3
► SP is decremented by 4

After the execution of STOSB,the CX wil be……..
►Incremented by 1
►Incremented by 2
►**Decremented by 1**
►Decremented by 2

Which bit of the attributes byte represents the red component of foreground color
► 3
► 2
► 1
► **0**

Destination location always lies in
►DS:SI
►DS:DI
►ES:SI
►**ES:DI**

Subjective questions:
Q.No1: During execution of the instruction "mov word [ES: 0], 0x0741" what represent the "41" byte. Marks 2

Ans) 41 represent ASCII code for 'A'.

Q.No2: How many BYTES will be move by each of the following block of codes? Marks 2

a) MOV cx,384
REP movsb
b) MOV cx,
384 REP movsw

Q.No3: When the instructions "push ax" is executed in decrementing stack how the value of SP will change. Marks 3

Answer: When the instructions "push ax" is executed in decrementing stack, SP is decremented by two and IP is pushed onto the stack.

Q.No4: Explain the procedure for testing selective bit. Marks 3

AND can be used to check whether particular bits of a number are set or not. Previously we used shifting and JC to test bits one by one. Now we introduce another way to test bits, which is more powerful in the sense that any bit can be tested anytime and not necessarily in order. AND can be applied on a destination with a 1-bit in the desired position and a source, which is to be checked. If the destination is zero as a result, which can be checked with a JZ instruction, the bit at the desired position in the source was clear. However the AND operation destroys the destination mask, which might be needed later as well. Therefore Intel provided us with another instruction analogous to CMP, which is non-destructive subtraction. This is the TEST instruction and is a non-destructive AND operation. It doesn't change the destination and only sets the flags according to the AND operation. By checking the flags, we can see if the desired bit was set or cleared.

Q.No5: Write an assembly program to clear screen. Marks 5

Program: 6.1 (handouts)
; clear the screen

```
[org 0x0100]
mov ax, 0xb800                  ; load video base in ax
mov es, ax                      ; point es to video base
mov di, 0                       ; point di to top left column

nextchar:       mov word [es:di], 0x0720        ; clear next char on screen
add di, 2                       ; move to next screen location

cmp di, 4000                    ; has the whole screen cleared
jne nextchar                    ; if no clear next position

        mov ax, 0x4c00                  ; terminate program
        int 0x21
```

Q.No6: Write an assembly program to print zero on the whole screen using DOS. Marks 5

Yeh nhi ata…..

MY TODAYS PAPER CS401
10 dec 2012 at 11.00 am
MCQS

he second byte in the word designated for screen location holds
o The dimension of the screen
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► SP is decremented by 3
► SP is decremented by 4

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►Incremented by 2
►**Decremented by 1**
►Decremented by 2

Which bit of the attributes byte represents the red component of foreground color
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► 2
► 1
► **0**

Destination location always lies in
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►DS:DI
►ES:SI
►**ES:DI**

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        int 0x21
```

Q.No6: Write an assembly program to print zero on the whole screen using DOS. Marks 5

Yeh nhi ata…..

MyCuretpaper CS401 Session 11:00 AM
Allama Iqbal Institute Of Technology Daska
21-which flag behaves in which instruction as amplied oprand in assembly Language. 2Marks
22-what will happen after executing the instruction"[OSSDI,[p+4] 2Marks
23-For what purpose"I**N**T1"is reserved 3Marks
24-How push instruction works in assembly language progaming. 3Marks
25-write a suroutine to calclate the string length. 5Marks
26-Write an assembly program to clear computer screen 5Marks

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today my cs401 paper 25.05.13 9:00am

paper was very easy mostly from 15 to 20 lecture
MCQ mostly about print on screen and registers.
some questions
Q1 1 character store in 1 word in memory what is store in its upper byte and lower byte.
ANS:IN lower the character code and in higher its attributes.
Q2 write the procedure to clear a selective bit
Q3 write the code for these
a) print charterer on screen
b) clear the screen
how many block instruction in 8088 architecture also write there names.... (5)
a question about programming in stack.....5

My todays CS401 Mid paper 11:00 AM (Farrukh)
2 marks....
1:- from where does the content of SI and DS register and loaded as a execution of the instruction "LDS SI,[BP+4]
2:- write the syntax of PUSH instruction.
3 marks.....
3:-How the value changes of stack Pointer(SP) after every push and pop instruction.
4:-How string instruction work on a block of data.
5 marks....
5:-In case of branching technique used in INTEL's architechtur, which instruction used to provide temporary diversion and how?
6:-in the program HELLO WORLD desired location , what functionality is achieved from the given code lines.
Mov al,[SI]
Mov [ES:DI], ax
add DI,2
add SI,1
---
objective portion zyada tough nahin tha. colour byte code lazmi yad kr lena ap log. uss main se 4 MCQ thay.
0= blue Fg 1= green FG 2= Reg FG
yeh walay. baki takriban kuch MOAZ ki file mai se thay.

Asslam u alikum
35% from Moaz files, 20 MCQs
other was new.
subjective total 6 questions
Q1: y we don't use REP with LODS? 2 marks
Q2: how pop work? 3 marks
Q3: what is temporary diversion and how it works? 3 mark
Q4: picture of rotation was given , we have to tell its name:answer is ROL 2 mark
Q5: five line code was given from scrollup screen , we have to tell one by one , what these lines do, mean give comments? marks
1 question i forgot . was from routine

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my today's paper . gud luck

1. Which instruction is used to determine the zero byte in string?
2. In case of multiplication of two 8-bits numbers, the product will be composed of how many bits?
3. Which two instructions are used to check whether particular bits are set or not? How these two instructions differ from each other?
4. In case of branching techniques used in Intel’s architecture, which instruction is used to provide temporary diversion and how?
5.How many bytes will be moved by each of the following block of codes?
a) MOV cx, 384

REP movsb
b) MOV cx, 384
REP movsw
6. Give the new values of AX and DX for each of the following instructions, or write if the overflow occurs.
a. DIV BX, if DX contains 0000h, AX contains 0007h, and BX contains 0002h
b. DIV BX, if DX contains 0000h, AX contains FFFFh, and BX contains0010h

---

How stack data structure is help full in assembly … … … 2 marks
What is the purpose of DF? What happen when DF=1. . . 2 marks
How string instruction work n data? 3 marks
Which instructions are used to call a subroutine? 3 marks
Replace the following invalid statement with a single valid statement? 5 marks
Pop IP
Mov IP,L5
Sub SP,2
How many block of instructions are available? Writ name 5 marks

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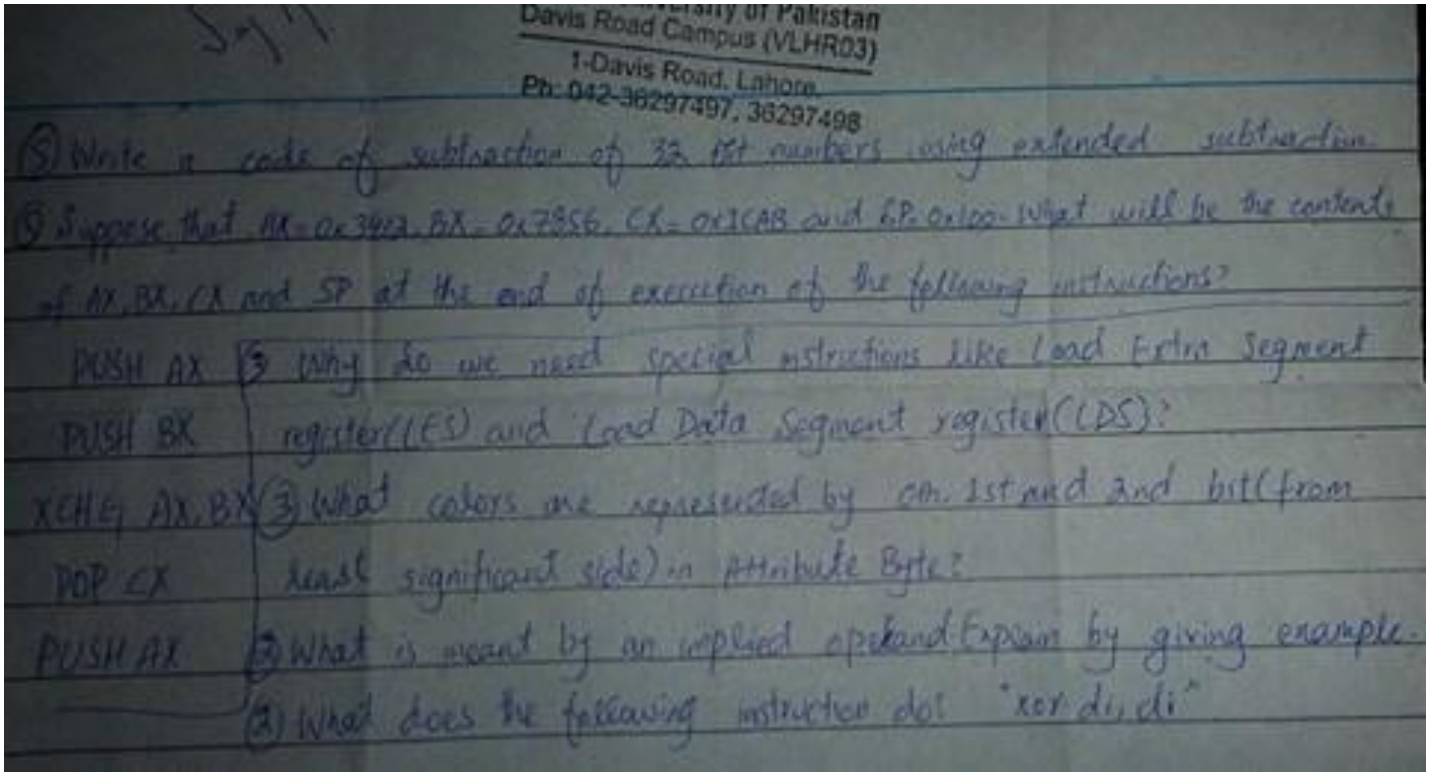
paper cs401 (25th may 2013)
1. How the string instruction is used in the block of memory?
2. For what purpose DS and ES registers are generally used in the context of video memory? 2 marks
3. Write a subroutine to calculate the string length? 5 marks
4.bubble sort code likhna tha .5 marks
bqi 2 qustions yad nahi
mcqs 50% past papers ma sy thy

---

my today's paper:
q.1) what z meant by de facto standards?
q.2) assume that there r 4 parameteres in a stack write a single instruction to clear the stack?
q.3) write a code to left shift 32 bit of number in a memory label num1?
q.4) what is divide overflow error?code was given 2 cmplt?
q.5) in AL a num was given with a carry flag we have to apply operatons SHR , SAR , SHL or baki b?
q.6) how cn we convert a two dimensional video memory into one dimensional sumthng like dat
datx it mcqs were too easy mostly 4rm da past



My Paper Was Easy & Also It Has Moaz Mcq's about 40% Sultan k Mcq's Aur Moaz ki subjective main sye kuch nahi aya...
Most Are From AScII & Color Code ... Stack .. From Lecture 15 to 22...

Long Main 2 marks Ka Code Likhna Tha.. 3 Mark Main Blue Ka Attribute Byte Btana Tha Mean in position 0....

5 Marks is used for Clear screen Program Code & understanding.. Last 5 marks For Stack Obligation Programming Code Likhna Tha...

My Today Paper of CS401.
I`m only sharing the MCQs because many students demand it and need it.
1. The Extended ASCII has_____?
2. In String instructions, he mode is called auto-decremant mode when_____?
3. To Reserve 8-Bits in memory _____ directive is used.
4. After the execution of REP instruction CX will be decremented?
5. In STOSW instruction, when DF is Set SI is X.
6. In Which of the following flag will be affected by MOVSW?
7. Which register is/ are change during the execution of the CALL instructions?
8. ASCII code of "A"
9. iAPX88 ARCHITECTURE Consists of _____ registers?
10. Code segment is associated to _____ registers by default.
11. The Foreground and background color parameters are set by _____?
12. What does NASM means_____?
13. Maximum number of bits in video attributes?
14. For _____ instructions, repetition is hard coded in the processor instead of using loop?
Ans Khudi find kr lain plz..... ager phr b na mily to nechay comment kry i will provide you all ans.
Note: VU new policy se darne ki koi zaroorat ni q k ye ap sb k faidy k liye hai. Aur jo log vu ko blame krty hain k ye degree ni dyty jaan kr phans dyty hain due to earning to wo mje PM kr unka b shak door ho jaye ga.
And must read past paper q k past paper se passing paper ata ha. Jis ko meri bt se itfaaq nahi wo b mje PM kry uska b shak door ho jaye ga

---

write a codee which display 0 on DOS screen
5 marks
why we use callee nt caller explain
(5) Write a Assembly language code for a bubble sort sub routines parameters
from stack? (5 Marks)
(devil) Write an algorithm that is to point in Assembly language? (5 Marks)
current paper hai yeh aj ka
iss jaisa hi aya tha

AOA
fellows
paper past main sy 20% objective hn gay
or subjective question areeeeeeee
1 type of call instruction and its names
2 which logical operation are used to see o and 1 bit
3 bauble sorting program
4 how string works when the data of memory is blocked
5: what will happen if df is 1
6: program ki functionality write karni the .....
paper tough ni tha but main nay time soo kar guzar diya app log bi mujh follow karen

---

today's my paper of cs401
my paper was easy. 85% mcq's were from MOAZ file
Subjective:
(1) what are intra segment call and inter segment call?
(2) who the PUSH instruction work in assembly language programming?
(3) who the zero flage work with REPE and REPNE?
(4) why we need the general register in LES and LED instruction?
(5) who the CALL differentiate between intra segment call and inter segment call?
(6) a piece of code is given from hello word programe.the code is given below: in the programe the SI is point to the string and DI to point to the top left location of the screen
mov al, [si]
mov [es:di], ax
add di,2
add si,1
what functionality the programe show?

remember me in ur prayers!
best of Luck

Write code for swapping the value of Ax and Bx register using stake operation (2)
2. Which three registers are affected as the result for call (2)
3. Assembly code of two Compliments of numbers stored in Ax and store result in Dx (3)
4. Illustrate the reason of introducing string instruction in 8088 (3)
5. Identify only two prefix which are meaningful with CMPS instruction. Justify the answer (5)
6. In IAPX88 Processor what limitation are there for multiplying a 16-bit number by 2 and which operation can be used to resolve multiplication limitation ? Give an example (5)

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today my paper....
1:-in the instruction,mov word[es:160] 0x1230"30 represent the character.....
A

B(not sure)
0
1
2:- The bit of .....work independently and individualty
index register
base register
flag register (true)
accumulator register
3:- an offset alone is not complete without.....
segement (true)
code lable
data lable
index register
4:- for the execution of instruction "DIV:BX" the implied divided will be store in.....
DX:AX
DX:BX(not sure)
CX:DX
CX:AX
5:- the STOS instruction,implied source will always in.....
AL or AX Register (true)
DL or DX Register
BL or BX Register
CL or CX Register
6:- suppose BL=0x05,what will be new value of Bx after ececuation of instruction SHR BX,2?
0x03
0x02
0xA
0x05(not sure)
7:- which of the following cannot appear as destination operand in an instruction
variable
Register
constants(not sure)
memory address
8:- to transfer control back, the RET instruction take.....
2 Argument
3 Argument (true)
4 Argument
No Argument
9:- the type of jump in which we can go from one segment to any other segment is called
Near jump
short jump
far jump
JMP(not sure)
10:- the execuation of the instruction "mov word [ES:DI]0x0720
will clear next charactor on screen
will print "20" at top left of the screen
will print "20" at top right of the screen
will move DI at location 0720 on the screen (true)
11:-The execution of the instruction “mov word [ES : 0], 0x0741” will print character “A” on screen , background color of the screen will be
Black (true)
white
red
blue
12:- When a 16 bit number is divided by an 8 bit number, the quotient will be in
AL (true)
AX
AH
DX
13:- To Reserve 8-Bits in memory ____directive is used.

db (true)
14:- In Which of the following flag will be affected by MOVSW_____
No effect in flags (true)
15:- ASCII code of "A_____
0×41 (true)
16:- Code segment is associated to _____IP___ registers by default.
IP (true)
17:-The iAPX88 processor supports .....modes of memory access.
5
6
7(true)
8

subjective paper:-
1:- describe working of "NOT"operation?
2:- how string instruction work on a block of data?
3:- which instruction is used to determine the zero byte in string?

---

today cs401 paper
1:what is defacto stander (2)
2:Why REP prefix is generally not used with LODS instruction? (Marks: 2)
3:what reasoning the default segment association of BP with SS (3)
4:Enlist the flag that will be eefected by DIV instruction (3)
5:Write a subroutine to calculate the string length (5)
6:Write a code for adding two 32 bit number using extend addition(5)

My Today paper!
MCQS are totally from moazz file
1) which instruction is used to the Zero byte in string. 2marks
2) if SP=0x2000, then what will be the new value of SP after the given instruction is executed? RET 4
3)what happen behind the scene when character is displayed on monitor screen?
4)how string instrucion block of data?
5)explain the operation that are performed by processor when interrupt is generated?
6)suppose AL contain 11001011b and CF=1, give the new content of AL after each of the following instrution is executed.
SHL AL,1
SHR AL,1
ROL AL,CL
SAR AL,CL
RCR AL,CL
