VISIT ANY MORE SOLUTIONS FREE

www.vuanswer.com

CS101 ASSIGNMENT 1 SOLUTION SPRING 2021

Provided by VU Answer

SUBMIT ASSIGNMENT FORMAT

Submit your assignment in .doc or docx format only.

QUESTION NO 1:

Given is a snapshot of memory addresses E2 to F4 and CPU registers 0 to F. All bit patterns in the memory cells are represented in hexadecimal notation.

VU Answer
your right path

SUBSCRIBE OUR CHANNEL

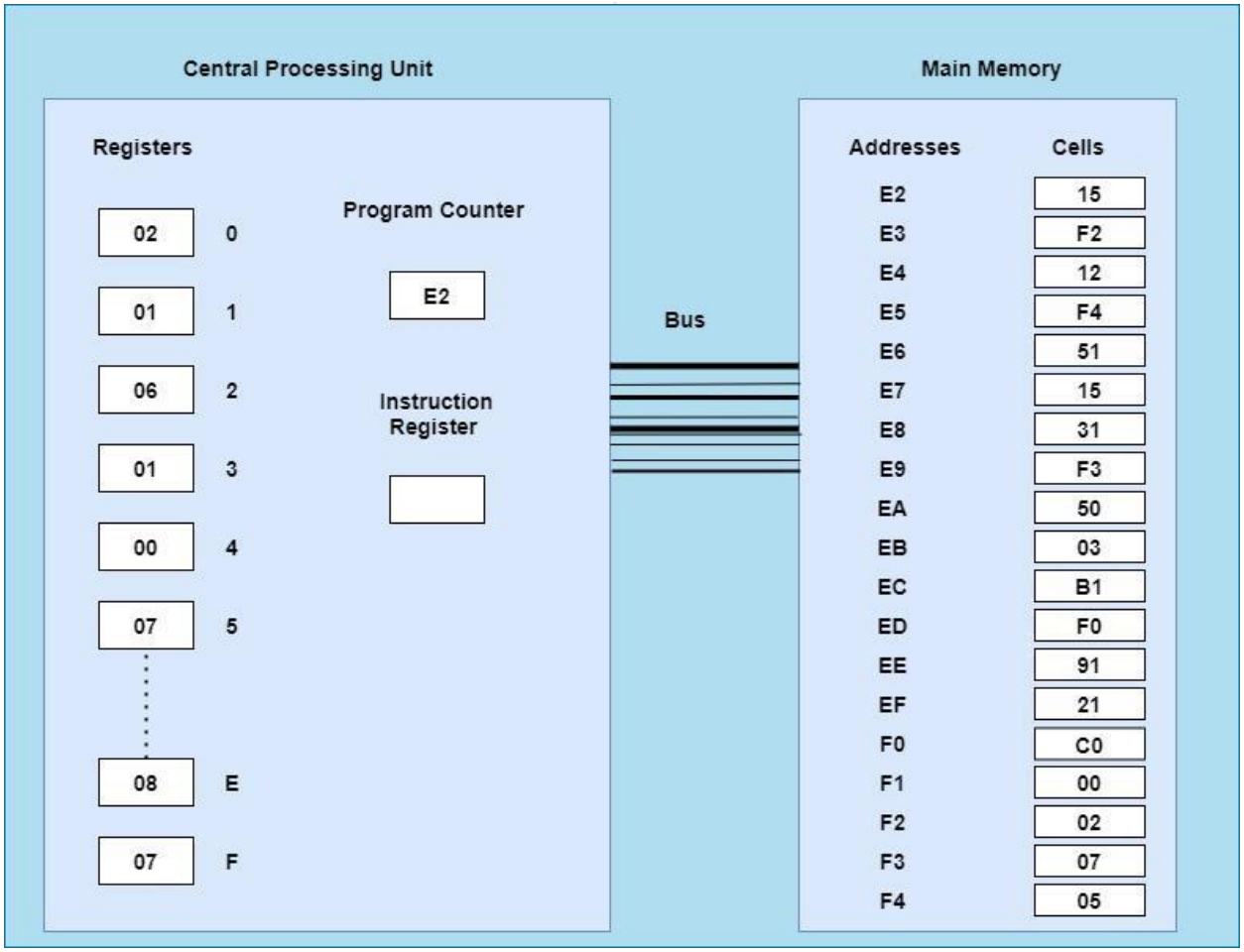
https://www.youtube.com/channel/UCvFS8fAv4bvZsOmWuWMIg3Q

WHATSAPP GROUP JOIN

https://chat.whatsapp.com/HGu2lvOWPsi0tpPGc4IGDZ

VISIT ANY MORE SOLUTIONS FREE

www.vuanswer.com



SUBSCRIBE OUR CHANNEL

https://www.youtube.com/channel/UCvFS8fAv4bvZsOmWuWMIg3Q

WHATSAPP GROUP JOIN

https://chat.whatsapp.com/HGu2lvOWPsi0tpPGc4IGDZ

VISIT ANY MORE SOLUTIONS FREE

www.vuanswer.com

Assume that the Program Counter has E2 as its initial value. Using the information provided in the above Figure 1, answer the following questions.

Note: Use the table provided in Appendix C at page 581 of book.

SOLUTION:

Q.1) Determine the contents of register 1 when the machine halts.

ANSWER:
15

Q.2) Write down the bit pattern (in hexa decimal) at memory address F3 when the Halt instruction is executed.

ANSWER:
0705

Q.3) How many times the machine instruction at address EE is executed before the machine halts

SUBSCRIBE OUR CHANNEL

https://www.youtube.com/channel/UCvFS8fAv4bvZsOmWuWMIg3Q

WHATSAPP GROUP JOIN

https://chat.whatsapp.com/HGu2lvOWPsi0tpPGc4IGDZ

VISIT ANY MORE SOLUTIONS FREE

www.vuanswer.com

ANSWER:
6

Q.4) Determine the contents of register 0 after the instruction at address EC is executed.

ANSWER:
91

Q.5) Determine the contents of register 2 when the instruction at address F0 is executed.

ANSWER:
07

VU Answer
your right path

SUBSCRIBE OUR CHANNEL

https://www.youtube.com/channel/UCvFS8fAv4bvZsOmWuWMIg3Q

WHATSAPP GROUP JOIN

https://chat.whatsapp.com/HGu2lvOWPsi0tpPGc4IGDZ

VISIT ANY MORE SOLUTIONS FREE

www.vuanswer.com

QUESTION NO 2:

a. Perform binary addition on given numbers:

SOLUTION:

$\boldsymbol{Find\ 20\frac{1}{16}}$

2^4	2^3	2^2	2^1	2^0	Radix	2^{-1}	2^{-2}	2^{-3}	2^{-4}
16	8	4	2	1		$1/2$	$1/4$	$1/8$	$1/16$
1	0	1	0	0		0	0	0	1

Final Answer is $\boldsymbol{20\ \frac{1}{16} = 10100.0001}$

$\boldsymbol{Find\ 7\frac{1}{4}}$

2^2	2^1	2^0	Radix	2^{-1}	2^{-2}
4	2	1		$1/2$	$1/4$
1	1	1		0	1

Final Answer is $\boldsymbol{7\ \frac{1}{4} = 111.01}$

SUBSCRIBE OUR CHANNEL

https://www.youtube.com/channel/UCvFS8fAv4bvZsOmWuWMIg3Q

WHATSAPP GROUP JOIN

https://chat.whatsapp.com/HGu2lvOWPsi0tpPGc4IGDZ

VISIT ANY MORE SOLUTIONS FREE

www.vuanswer.com

b. Convert the following binary number into ASCII code and then into its equivalent decimal representation.

01001001010000010100110101011100

SOLUTION:

Divide from left in 8 Characters
01001001
01000001
01001101
01011100

2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	
128	**64**	**32**	**16**	**8**	**4**	**2**	**1**	
0	1	0	0	1	0	0	1	**=73**
0	1	0	0	0	0	0	1	**=65**
0	1	0	0	1	1	0	1	**=77**
0	1	0	1	1	1	0	0	**=92**

SUBSCRIBE OUR CHANNEL

https://www.youtube.com/channel/UCvFS8fAv4bvZsOmWuWMIg3Q

WHATSAPP GROUP JOIN

https://chat.whatsapp.com/HGu2lvOWPsi0tpPGc4IGDZ

VISIT ANY MORE SOLUTIONS FREE

www.vuanswer.com

=73 =I
=65 =A
=77 =M
=92 =\
So
01001001010000010100110101011100 = IAM/s

REGARD SARIM

WHATSAPP +923162965677

FOR CORRECT FREE ASSIGNMENT

www.vuanswer.com

SUBSCRIBE OUR CHANNEL

https://www.youtube.com/channel/UCvFS8fAv4bvZsOmWuWMIg3Q

WHATSAPP GROUP JOIN

https://chat.whatsapp.com/HGu2lvOWPsi0tpPGc4IGDZ

VISIT ANY MORE SOLUTIONS FREE

www.vuanswer.com

PLEASE NOTE:

Don't copy-paste the same answer.

Make sure you can make some changes to your solution file before submitting copy paste solution will be marked zero.

If you found any mistake then correct yourself and inform me.

Before submitting an assignment check your assignment requirement file.

If you need some help and question about file and solutions.

MORE ANY ASSIGNMENTS SOLUTION FREE

www.vuanswer.com

SUBSCRIBE OUR CHANNEL

https://www.youtube.com/channel/UCvFS8fAv4bvZsOmWuWMIg3Q

WHATSAPP GROUP JOIN

https://chat.whatsapp.com/HGu2lvOWPsi0tpPGc4IGDZ