**Microprocessor and Computer Architecture**

**UE20CS252**

**4th Semester, Academic Year 2021-22**

Date:1 feb 2022

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| --- | --- | --- |
| Name: Naman Choudhary | SRN: PES2UG20CS209 | Section  D |

Week#\_\_\_\_3\_\_\_\_\_\_\_ Program Number: \_\_\_\_1\_\_\_

Title of the Program

**Write a program in ARM7TDMI-ISA to find the sum of N data items in the memory. Store the result in the memory location.**

**a. Use Full word (.word directive)**

**b. Use Half word(.Hword directive)**

**c. Use Byte wise (.Byte directive)**

**{1,2,3,4,5}**

1. ARM Assembly Code(1)
2. Output Screenshot(1)
3. Output table (1)

**Included in above screenshots**

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| Name: Naman Choudhary | SRN:PES2UG20CS209 | Section  D |

Week#\_\_\_\_3\_\_\_\_\_\_\_ Program Number: \_\_\_\_2\_\_\_

Title of the Program

**Write a program in ARM7TDMI-ISA to find the sum of N natural numbers. Store the result in the memory location**

1. ARM Assembly Code(1)
2. Output Screenshot(1)
3. Output table (1)

**Included in above screenshots**

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Week#\_\_\_\_3\_\_\_\_\_\_\_ Program Number: \_\_\_\_3\_\_\_

Title of the Program

**Convert the following statement in C language into an ALP using ARM7TDMI – ISA.**

**IF([A]==[B]) then C=[A]+[B];**

**ELSE IF ([B]==[C]) D=[A]-[B];**

**ELSE E=[A]\*[B]**

**Where A,B C, D & E are memory locations.**

1. ARM Assembly Code(1)
2. Output Screenshot(1)
3. Output table (1)

**Included in above screenshots**

**Disclaimer:**

* The programs and output submitted is duly written, verified and executed by me.
* I have not copied from any of my peers nor from the external resource such as internet.
* If found plagiarized, I will abide with the disciplinary action of the University.

Signature:Naman Choudhary

Name:Naman Choudhary

SRN:PES2UG20CS209

Section: D

Date:01/02/2022