**Computer Organization & Architecture Lab**

**Lab Report # 02**



Submitted By: **AWAIS SADDIQUI**

Registration No: **21PWCSE1993**

Section: **“A”**

“On my honor, as student at University of Engineering and

Technology, I have neither given nor received unauthorized.

assistance on this academic work”



**Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Submitted to:

**Dr. Bilal Habib**

**Department of Computer Systems Engineering**

**University of Engineering and Technology, Peshawar.**

**ASSESSMENT RUBRICS COA LABS**

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| **LAB REPORT ASSESSMENT** | | | | |
| **Criteria** | **Excellent** | **Average** | **Nill** | **Marks Obtained** |
| 1. **Objectives of Lab** | All objectives of lab are properly covered  [Marks 10] | Objectives of lab are partially covered  [Marks 5] | Objectives of lab are not shown  [Marks 0] |  |
| 1. **MIPS instructions with**   **Comments and proper indentations.** | All the instructions are well written with comments explaining the code and properly indented  [Marks 20] | Some instructions are missing are poorly commented code  [Marks 10] | The instructions are not properly written  [Marks 0] |  |
| 1. **Simulation run without error and warnings** | The code is running in the simulator without any error and warnings  [Marks 10] | The code is running but with some warnings or errors.  [Marks 5] | The code is written but not running due to errors  [Marks 0] |  |
| 1. **Procedure** | All the instructions are written with proper procedure  [Marks 20] | Some steps are missing  [Marks 10] | steps are totally missing  [Marks 0] |  |
| 1. **OUTPUT** | Proper output of the code written in assembly  [Marks 20] | Some of the outputs are missing  [Marks 10] | No or wrong output  [Marks 0] |  |
| 1. **Conclusion** | Conclusion about the lab is shown and written  [Marks 20] | Conclusion about the lab is partially shown  [Marks 10] | Conclusion about the lab is not shown[Marks0]  [Marks 0] |  |
| 1. **Cheating** |  |  | Any kind of cheating will lead to 0 Marks |  |
| Total Marks Obtained:\_\_\_\_\_\_\_\_\_\_  Instructor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | |

**BRANCHING OPERATION:**

**Question # 01:**

**Enter a number 5432 from user and then display the last digit in the console.**



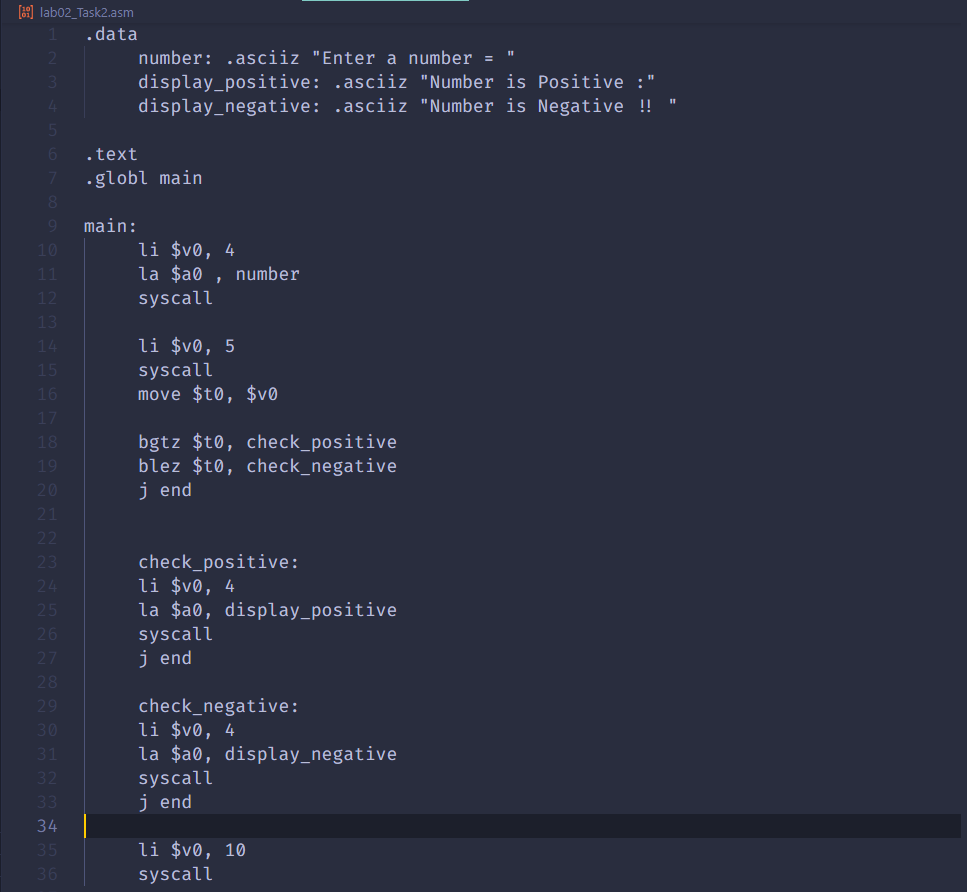
**Output:**

A white rectangular object with a black line

Description automatically generated

**Question # 02:**

**Check whether a number input by user is negative or equal to zero or greater than zero using branching.**



**Output:**

A long thin metal bar

Description automatically generated with medium confidence

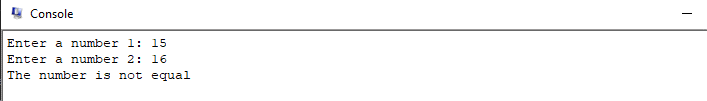


**Question # 03:**

**Check using branch whether the number input by user is equal or not.A screenshot of a computer program

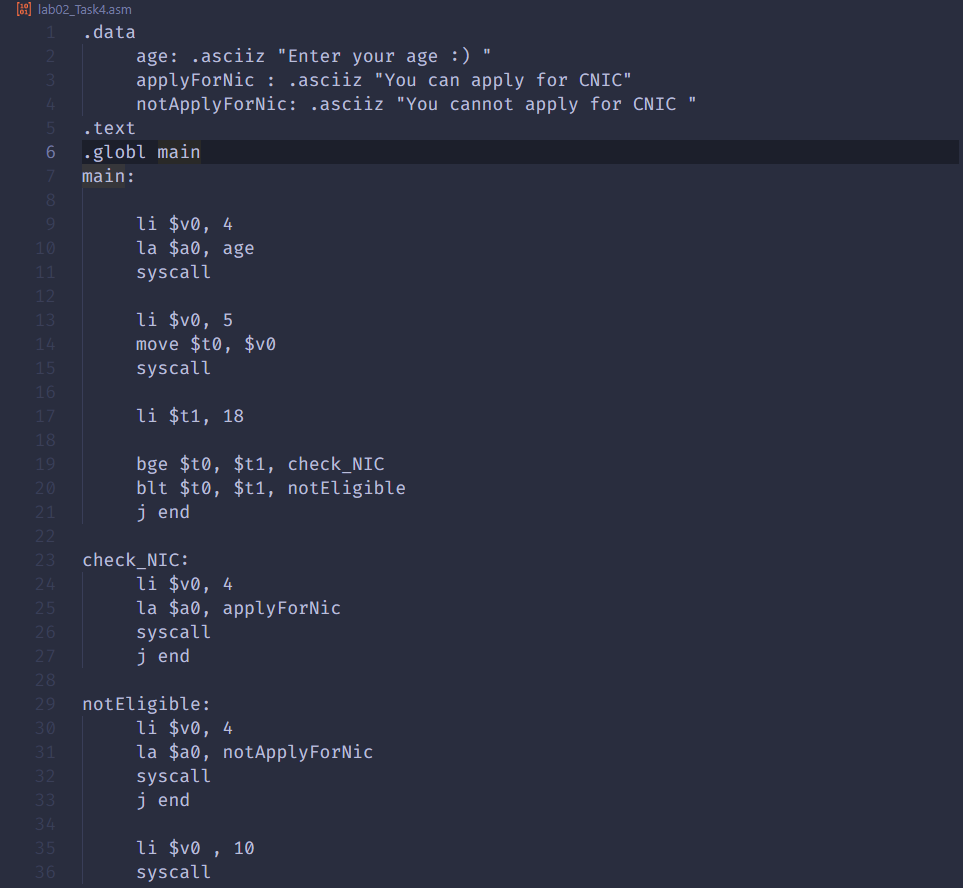
Description automatically generated**

**Output:**



**Question # 04:**

**Write the assembly of the below C++ code.**

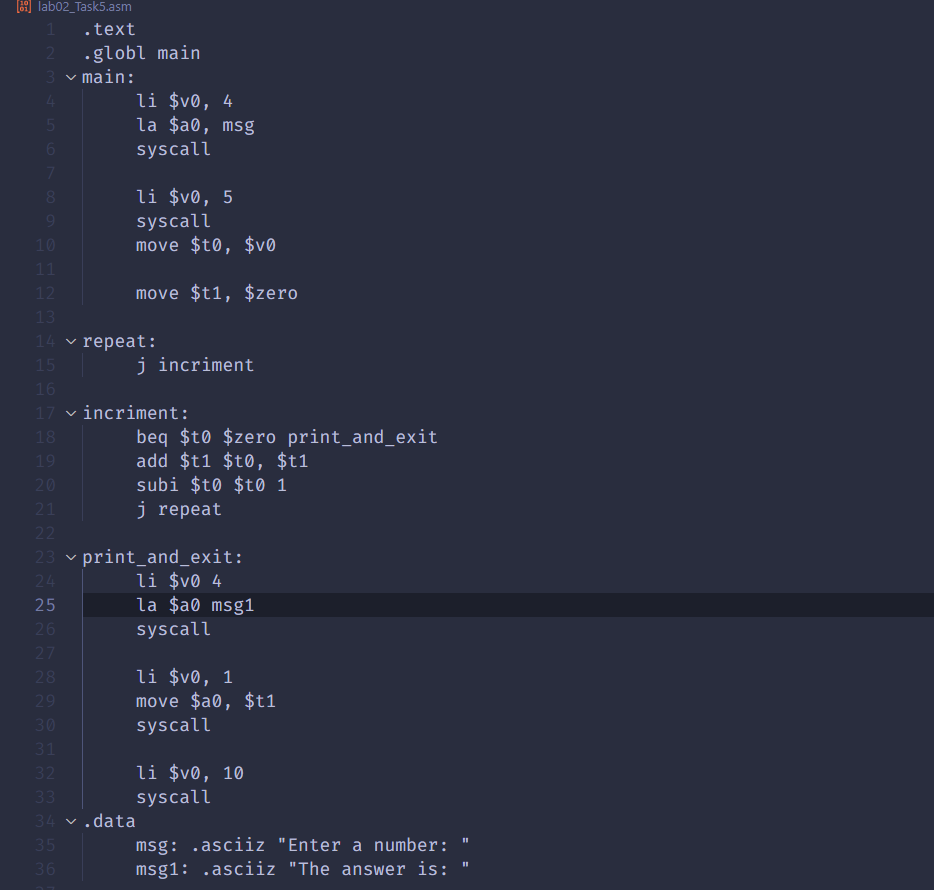


**Output:**

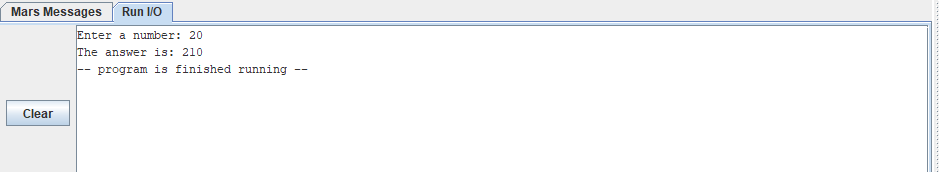


**Question # 05:**

**Write a program which takes a limit from user and compute the sum of numbers from 0 to the limit.**



**Output:**



Note: ***This code (Task\_5) does not run on QTspim that’s why I use Mars.***