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| **CS - 224 Computer Architecture & Organization** |
| Course Instructor: **Eng. Qaiser Ijaz** |
| **Lab** 04 |
| Issue Date: **24 Oct 16** |
| **Name & Roll No:** YOUR NAME HERE; 14CSXX |

**Objective:** To implement an algorithm for copying a fixed number of elements from one array into another using MIPS instructions.

**Procedure:**

1. Start QtSpim on your workstation.
2. Analyze the state zero.
3. Download the source file (Lab04.s) from the course group.

Directory is Course Group => Labs => Lab04.s

1. Follow the document, heading to heading.
2. Answer the questions or/and complete the task.
3. Include any other asked or needed content.
4. Repeat the lab either for MARS or MIPS SDE.

**Filling in the Program:**

Assume that you have an array of 10 elements with base address in $s0. Assume that the base address of the second array is in $t0. Copy the elements from the first array to the second. In order to receive full credit you must use a loop to traverse the elements of the arrays.

**Executing the Program:**

Once you have saved the program template, you can write the code, assuming that the base address of the source array is in $s0 and the base address of the destination array is in $t0. Details about executing the program can be found in the previous labs.

**Note:** Once you find that you have to make changes to your code, make the changes in a text editor, then reinitialize the simulator [**Simulator -> Reinitialize**], and load the file again [**File->Open**]

**Further Task:**

Suggest an improvement in this program or implement another way of doing the same job.