Student Name:	Lab 8

Write a MIPS program to perform the following tasks:

• Initialize the following symbols in your data section:

```
a = 0
b = 10
c = 5
d = 9
e = 7
```

- Ask the user to enter a value for k.
- Load the values for a-e from memory into registers
- Implement code equivalent to this if/elseif/else statement:

```
if (k == 0) {
  a = b + c;
  elseif (k == 1) {
  a = d + e;
  elseif (k == 2) {
  a = d - e;
  elseif (k == 3) {
  a = b - c;
  else {
  a = 0;
}
```

- After your calculation in registers, store the value of **a** back into the proper memory location.
- Print the value of a from the memory location (not the register).

## Example output - 1:

```
Please enter a value for k:0
The value of a is: 15

Example output - 2:
Please enter a value for k:2
The value of a is: 2
```

The following is required for all assignments and is included in the rubric for grading:

- You need to name your file as "LastName-Name-Lab8.asm" (Example: Talley-Michelle-Lab8.asm)
- You may use utils.asm, but you must name it LastName-FirstName-utils.asm and include it with your submission in a zipfile.
- Your program will need to have the exact output unless otherwise stated.
- Your source needs to have comments/pseudo code that explains your implementation.
- You need to include the following set of comments at the top of your source code for all assignments.

**#Your Name** 

#Assignment # (Example: Lab #8)

• You need to submit your source code on blackboard.