Student Name:	Lab 17

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 switch statement using a **jumptable**:

```
switch (k) {
case 0:
   a = b + c;
break;
case 1:
   a = d + e;
break;
case 2:
   a = d – e;
break;
case 3:
   a = b – c;
break;
default:
   a=0;
break;
}
```

- 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-Lab17.asm" (Example: Talley-Michelle-Lab17.asm)
- Your program will need to have the exact output unless otherwise stated.
- Your source needs to have comments that explain your implementation.
- You need to include the following set of comments at the top of your source code for all assignments.

Lab

#Your Name
#Assignment # (Example: Lab #17)

- You need to submit your source code on blackboard.
- You may use utils.asm, but you must name it LastName-FirstName-utils.asm and include it with your submission.