CECS 174 – Lecture 12 – Switches

Switch Statement –

A switch statement can be used in place of several if statements. It tests the value of a single variable against several different possible cases and then performs the actions associated with that case. The cases can be of type integer, char, or an enumerated type (no doubles or strings). The switch statement is especially useful for creating menus in your programs. Break statements are used at the end of a case so that the program does not continue on to the next case, but rather breaks out of the switch.

```
System.out.println("Enter a number between 1 and 4");

int input = in.nextInt();

switch (input)
{
     case 1:  System.out.println("This is case 1");
              break;

     case 2:  System.out.println("This is case 2");
              break;

     case 3:  System.out.print ("Hello ");

     case 4:  System.out.println ("there.");
              break;

     default: System.out.println("That is not an option");
              break;

}

/*Outputs:

1
This is case 1

2
This is case 2

3
Hello there.

4
there.

5
That is not an option
*/
```

Example: Menu - char

```
System.out.println("Calculator");
System.out.println("A.  Add two numbers");
System.out.println("B.  Multiply two numbers");

char menuOption = in.next().charAt(0);

switch (menuOption)
{
     case 'A':
     case 'a': System.out.println("Enter 2 numbers");
               int add1 = in.nextInt();
               int add2 = in.nextInt();
               System.out.println("Sum= "+(add1+add2));
               break;
     case 'B':
     case 'b': System.out.println("Enter 2 numbers");
               int mul1 = in.nextInt();
               int mul2 = in.nextInt();
               System.out.println("Product= "+(mul1*mul2));
               break;
     default:  System.out.println("Not an option");
               break;
}

/*Output:

A

__________

B

__________

X

__________

*/
```