

Assignment #3: BIT 1400

Due Friday Oct 25, 2013 11:59 pm

This third assignment is intended to get you working with switch statements and loops.

For this assignment you will be required to submit two separate programs.

1. TV Plan

Create a program that asks the user what type of TV package they would like.

This program should do the following:

1. Use a do-while loop to show the user a menu to select a TV package from it and ensure that they have selected a valid choice (type casting a char as an int helps with the expression).
2. Display the Menu Options on the screen for the user.
3. Use a switch statement to tell the customer the options that come with each plan and update the price. Each package simply adds on new features. As you may recall, without break statements the program will fall through the switch structure statements.
4. Tell the user the total price, including a 13% TAX.

The output of the program should look like.

```
What type of TV package would you like to buy?
A:          Basic Package
B:          Basic HD Package
C:          Specialty Channels Package
D:          Movies Package
E:          Super Sports Package
F:          Ultra HD Package

Please enter a value between A and F
F

This Package Comes with:

All HD.. All the time: $19.99
Sports Super Pack: $9.99
Movie Channels: $5.99
Specialty Channels: $4.99
Basic HD Channels: $9.99
Basic Cable Channels: $29.99

The price for this package is $91.46
```

If I were to choose C I should expect that only the bottom three options would come with the package.

```
What type of TV package would you like to buy?
A:      Basic Package
B:      Basic HD Package
C:      Specialty Channels Package
D:      Movies Package
E:      Super Sports Package
F:      Ultra HD Package

Please enter a value between A and F

C

This Package Comes with:

Specialty Channels: $4.99
Basic HD Channels: $9.99
Basic Cable Channels: $29.99

The price for this package is $50.82
```

2. Test Totals and Average

Write a C++ program that uses a for loop to have the user enter in ten test scores from a student between 0 and 100. Make sure that the program uses a while loop to ensure that the data is within the proper range. The program adds all of these test scores together and calculates the average score. The average is printed with one decimal place.

Here is the output from an acceptable version of the program.

```
Enter test score number 1:
89
Enter test score number 2:
89
Enter test score number 3:
78
Enter test score number 4:
87
Enter test score number 5:
988
Enter a value between 0 and 100
78
Enter test score number 6:
76
Enter test score number 7:
76
Enter test score number 8:
99
Enter test score number 9:
88
Enter test score number 10:
78
The average score for the tests is: 83.8
```

Each program is worth 50 marks: 40 for code that runs properly and does what is described above and 10 for organization and comments. These programs can be submitted as C++ code (file extension .cpp).

Be sure to hand this assignment in on time in cuLearn as no late submissions will be accepted.

If there are any questions feel free to ask.