

**VB Programming**

**Selection**

In the last sheet the questions started to focus on the idea of **Two** conditions. We can make use of **Logical Operators** that allow more than one condition to be used

**Statements Used**

AND -> &&

OR -> ||

NOT -> !

**The Program**

namespace ConsoleApplication

{

class Program

{

static void Main(string[] args)

/\* Using an IF Statement with Logical Operators

\* D Bateson

\* September 2017 \*/

{

int mark;

Console.WriteLine("Please enter a mark between 0 and 65");

mark = int.Parse(Console.ReadLine());

if (mark < 0 || mark > 50)

{

Console.WriteLine("Invalid Mark");

}

Console.ReadLine();

}

}

}

**Programming Tasks**

For each of these programming tasks, create and test a program. For each:

* Add comments with a description of the task, your name and the date
* Copy the program to a Word document
* Paste a screen shot of the console as evidence that the program worked
* Check that you have your name, set and date in a header

**Task 1**

Write a program that allows a student’s name & a mark to be entered for a Student – along with their Target Minimum Grade (as a single grade). The Program will work out their Grade and output a message for them as follows:

“Mary, you achieved a C in your recent test which is better than your TMG of a D”

If the student scored less than 40 then they scored a U

If the student scored between 40 and 49 then they scored a D

If the student scored between 50 and 59 then they scored a C

60 – 69 is a B

Above 70 is an A

TMG can be entered as a single grade D – A

**Task 2**

Alter the program to take in two grades – a grade for Coursework and an Exam Grade. The program will work out an average of both and use this to evaluate the overall Grade given on the course.

**Task 3**

A sales person is allowed an allowance depending upon the amount of miles that they travel and the type of car that they own. The program will allow the user to enter a weekly mileage, engine size and fuel type and give an allowance amount to the user.

* The sales person will get paid 40p per mile for a car of 1500CC engine or less
* The sales person will get paid 50p per mile for a car with over 1500CC engine
* If the car is Diesel they will get paid an additional 3p per mile

**Task 4**

1. Alter the program to allow cars of 2000CC or over – they will receive 60p per mile
2. Alter the program to ask the sales person if they need an overnight stay or not
   1. If they require one they will get paid £65 per night for the first 2 nights
   2. If they stay 3 or more nights they only get paid £40 for each night over this