**Assignment 2 – 20%**

**Practice Question**

**You will be required to implement a program to a problem similar to this next week in the lab class (first hour)**

**50 % will go to the program functionality – does it work**

**10 % will go to readability/coding standards**

**30 % will go to program design – use of appropriate coding structures and methods**

**10 % will go to robustness (dealing with invalid inputs)**

A company requires an application to calculate employee daily pay. The basic pay is calculated as follows:

|  |  |
| --- | --- |
| hours worked | Hourly rate |
| 1-5 | €5.00 per hr for all hours worked |
| 6-7 | €6.00 per hr for all hours worked |
| 8-10 | €7.00 per hr for all hours worked |
| 11-15 | €9.00 per hr for all hours worked |
| 16-24 | €10.00 per hr for all hours worked |
| Anything else | Report an error |

(Implement this with a switch statement)

For employees under the age of 21, this figure is lowered by 10% if they have no qualifications.

For employees 21 and over this figure is raised by 15% if they have no qualifications and by 20% if they have a qualification.

The maximum daily pay anyone can receive, regardless of the above rules is €50

Design and write a program for the company that will read in the necessary employee details and calculate the pay the employee.

The program should calculate the pay of an unspecified number of employees, terminating when the user indicates that they do not wish to continue.

Your program will deal with mixed case inputs, for example if the user entered “YeS” for their qualification, the program shall deal with this as the user intended.

Make use of methods where appropriate, for example you should have a method to determine the hourly rate.

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***Example dialogue when you run your program***

*Enter hours worked : 5*

*Qualification (yes/no) :no*

*Enter employee age : 20*

*Your pay is : €22.50*

*Do you wish to calculate another yes/no ? :*