Task 3

Question 1: Write C++ Program that accomplish the each of following questions

1. Check character vowel or consonant using **SWITCH** case.

2. Using **SWITCH** find maximum between two numbers (**Note:**use only two variables e.g. number1, number2).

3. Print day of week name with **SWITCH** case.

4. Using **SWITCH** that tell user to enter two numbers then ask user to choose among deferent operations (e.g., +, -, *, /, %) then print the result

5. Print the following serial: {1, 3, 5, 7, 9,11, ... 99} .

6. Print the following serial: {1, 4, 9, 16, 25,36, ... 121}.

7. Print numbers divisible by 5, for the integers from 1 to 99.

8. Ask the user for enter 5 integers. The program should then print:
   a) The sum of the integers.
   b) The average of the integers.

9. Read a positive integer N, then calculate and print (N!).

10. Read a positive integer N and determine whether N is a prime.

11. Print numbers divisible by k, for the integers from m to n.

12. Read a positive integer N and determine whether N is a perfect square.

Question 2: What is the output of the following program fragment

```
int length = 25;
int width = 60;
if (length == 50)
    height = 4;
else
    height = 8;
cout << length << width << height;
```

Question 3: For those who want challenging problems 🎇 ⛔ 🚷 😂

1. Write a program that inputs number, sum the number into its individual digits and prints their sum [e.g. let the input number be 719. The sum of digits of 719 = 7 + 1 + 9 = 17.]

2. Read an integer from 1 to 999 and print the integer in words. Example, if 325 is read, the output should be: THREE HUNDRED AND TWENTY FIVE .

3. A simple payroll program, must read the name of an employee. If the name is not 'END', it then must read the number of hours worked, and the rate of pay per hour. Then, it must calculate the total pay, and print the name & total pay. This is repeated until the name read is 'END'.
   1. What is the purpose of the name 'END'?
   2. Use a WHILE construct to implement the above description.
   3. Could DO ... WHILE be used? Give reasons.

Try your best 😉, *Good luck* 🤝