Exercise 1:

(1) Write a program that take two integers from the user and print the results of this equation:

Result = ((num1 + num2) * 3) − 10

(2) Write a program that print your name and your grade in a new line.

(3) Write a program for converting temperature from degrees Celsius to degrees Fahrenheit,
given the formula:

$$F = C \times \frac{9}{5} + 32$$

(4) Write a program that reads the radius of a circle and calculates the area and circumference then prints the results.

(5) Write a program to print the ASCII value of a character input by the user.

(6) Write a program that print the relation between two integer number if those numbers are equal, not equal and which one contain the higher value.

(7) Write a program that takes three integers, and prints out the smallest number.

(8) Write a program that reads a positive integer and checks if it is a perfect square.

(9) Write a program that reads a student grade percentage and prints "Excellent" if his grade is greater than or equal 85, "Very Good" for 75 or greater; "Good" for 65, "Pass" for 50, "Fail" for less than 50.

(10) Write a program to make a simple calculator using switch-case. The calculator takes the operation (+ or – or * or /) and takes the two input arguments and print the results.

(11) Print sum of first 100 integers. (With data validation)

(12) Write a program that reads a positive integer and computes the factorial.

(13) Write a program that reads a positive integer and checks if it is a prime.

(14) Write a program to display English alphabets from A to Z.

(15) Write a program to calculate the power of a number. The number and its power are input from user.

(16) Write a program to reverse a number.

(17) Write a program to count number of digits in a decimal number.

(18) Write a program to display half pyramid using stars pattern.

```
*
* *
* * *
* * * *
* * * * *
```


(19) Write a program to display inverted half pyramid using stars pattern.

```
* * * * *
* * * *
* * *
* *
*
```

(20) Write a program to display a full pyramid using stars pattern.

```
    *
   ***
  *****
 *******
*********
```

(21) Write a program to display cross or X-shape using stars pattern.

```
*         *
 *       *
  *     *
   *   *
    * *
    * *
   *   *
  *     *
 *       *
*         *
```