



### Instructions:

- 1- Create a folder with your full name on the desktop.
- 2- Create 15 Text Documents in the folder and name them as Q1, Q2 ... Q15.
- 3- Save your code inside the Text Documents.

**Q1.** Declare variables of the following types: **int, float, double, char, string, bool** and initialize each variable with a value.

**Q2.** Declare an integer variable, name it as **firstNumber** and initialize it with a value of **25**.

**Q3.** Modify (Q2) and let the user enter the value by using **cin**.

**Q4.** Write a C++ program that declares a variable name as **cityName**, and ask the user to enter a city name.

**Q5.** Write a C++ program that asks the user to enter their name and surname, then the program should output the details.

```
Please Enter your first name: Aree
Please Enter your surname: Izzat
Your name is: Aree Izzat
```

**Q6.** Write a program that asks your first name and your age. The output should be as follows.

```
Input your first name: Shko
Input your age: 19
My name is Shko and I am 19 years old
```

**Q7.** Write a program in C++ to enter your name, then the program should bring your name into a square shape.

```
Enter Your name: Parwar
*****
*               *
*   Parwar   *
*               *
*****
```



**Q8.** Write a program to let the user enter his/her name and age, then the program should print the name and the year he/she was born.

```
Enter your name: Snur
Enter your age: 19
Your name is Snur and you were born in 2006
```

**Q9.** Write a program that allows the user to enter the profiles of two students, then prints the information as shown in the example below.

```
Enter Info for student 1.
Enter ID: 13
Enter Name: Ahmad
Enter Age: 20
Enter Gender: M

Enter Info for student 2.
Enter ID: 21
Enter Name: Sara
Enter Age: 17
Enter Gender: F

Student 1 Info: Your ID is 13, your name is Ahmed, your age is 20 and your gender is M.
Student 2 Info: Your ID is 21, your name is Sara, your age is 17 and your gender is F.
```

**Q10.** Write a C++ Program to Calculate Area of Square. The length of the side should be entered by the user.

```
Enter the length of side: 4.5
Area of square is: 20.25
```

**Q11.** Let the user enter a GPA and print it, then change the GPA and print it again!

**Note:** Use only 1 variable.

```
Enter a GPA: 3.1
The GPA is: 3.1
Change the GPA:3.4
The GPA now is: 3.4
```



**Q12.** Modify (Q11) to change the double variable to a **constant** type, and run it again, to see if you get any error. why?

**Q13.** Write a program to let a user create an account by entering his/her first name, last name, age, email and password, then the user should be able to login to the account.

```
Enter your first name: Saman
Enter your last name: Mustafa
Enter your age: 20
Enter your email: saman.mustafa@gmail.com
Enter your password: %saman%
```

-----  
Your account has been created successfully.  
-----

Login Form:

Enter e-mail: saman.mustafa@gmail.com

Enter password: %saman%

\*\*\*\*\*

Welcome dear Saman Mustafa

**Q14.** Create an application that converts the amount of day into hours, minutes, seconds and milliseconds. The user will insert the day amount, then the program calculates hours, minutes, seconds that are valid in that amount of time.

Write the day amount to calculate amount of hours, minutes and seconds in it?

5

Your time period composed of

5 day(s) => 120 hours, 7200 minutes, 432000 seconds



**The below question is for legends!!** 😎😎

**Q15.** Write a program that takes the prices of three items from the user and outputs the total price, then let the user enter a discount rate and print the total after discount.

Enter 1<sup>st</sup> item price: **50**  
Enter 2<sup>nd</sup> item price: **40**  
Enter 3<sup>rd</sup> item price: **20**  
Total is: 110  
Enter the discount: **15**  
Total after discount is: 93.5