

## **Week 1**

### **Exercise 1: My First C Program**

Write a C program that displays "My First C Program." and adds a newline to the end of the line.

#### **Example use case:**

```
My First C Program.
```

### **Exercise 2: Querying and printing numbers**

Write a C program that asks the user for two numbers and prints them. The first number is an integer and the second is a floating-point number. The numbers are stored in the variables and the content of these variables are printed. Print a floating-point number to two decimal places.

Add a newline to the end of each line

#### **Example use case:**

```
Give an integer:
10
Give a decimal number:
3.14159
You entered the numbers 10 and 3.14.
```

### **Exercise 3: Calculations with integers**

Write a C program that asks the user for two integers and stores them in variables. Display the following operations with results:

1. the sum of the numbers multiplied by two
2. the division of the numbers minus three
3. add one to the first number and subtract one from the second, then print the remainder.

As shown in the programming guide, the numbers can be increased and decreased in different ways. In C, the typical way to do this is with the ++ / -- operator.

As above, add a newline to the end of each line.

**Example use case:**

```
Enter the first integer:
16
Enter the second integer:
4
Calculations:
(16 + 4) * 2 = 40
(16 / 4) - 3 = 1
17 % 3 = 2
```

**Exercise 4: Read and print a character and a string**

Write a C program that prompts the user for a character and stores it in a variable. Additionally, create a string variable that can hold a string up to 20 characters long. Prompt the user for a string and store it in that variable. Print the character and string on the screen.

Add a newline to the end of each line.

**Example use case:**

```
Enter the character:
A
You entered 'A'.
Enter a string up to 20 characters long:
Programming
You entered the string 'Programming'.
```

**Exercise 5: Using variables to query and print data**

Write a C program that prompts the user for various information and prints it on the screen as shown in the example below. Pay attention to the variables used to store the data and their definition and print the floating-point number to one decimal place.

Add a newline to the end of each line.

**Example use case:**

```
Enter your first name:
Linus
Enter your last name:
Torvalds
Enter your age:
52
Enter your weight:
78.25
Your name is Linus Torvalds, your age is 52 years, and you weigh 78.2 kg.
```