



# **Mini Project Assignment**

## **CSF349-Cloud Computing**

### **Submitted By:**

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Section: D (P1)

### **Submitted to:**

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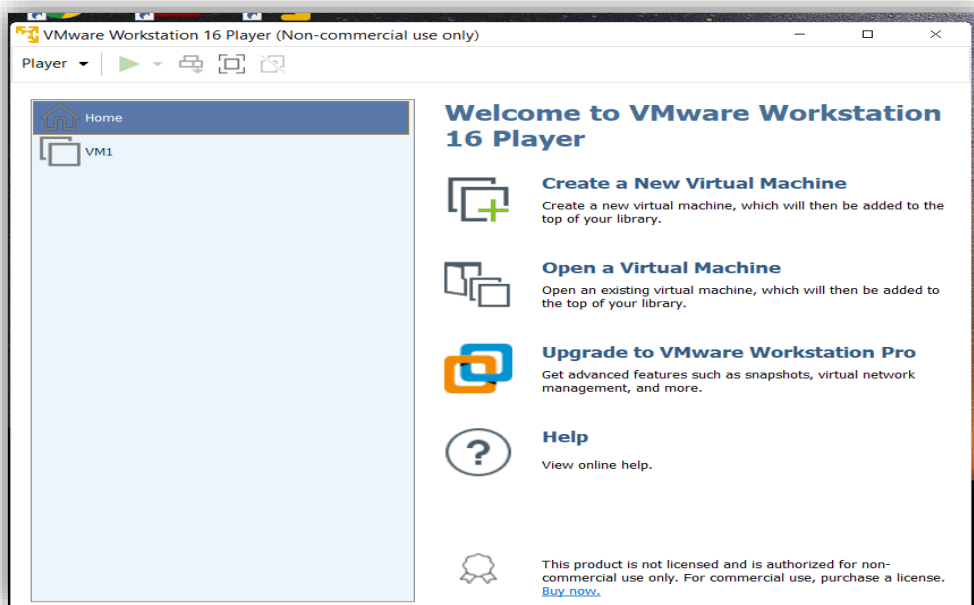
## 1. Problem Statement-

Create a VM for Ubuntu on Windows machine. Check C language is installed or not. If not then install and check by making program of simple calculator (+, - \* and /). The output must display your name with result.

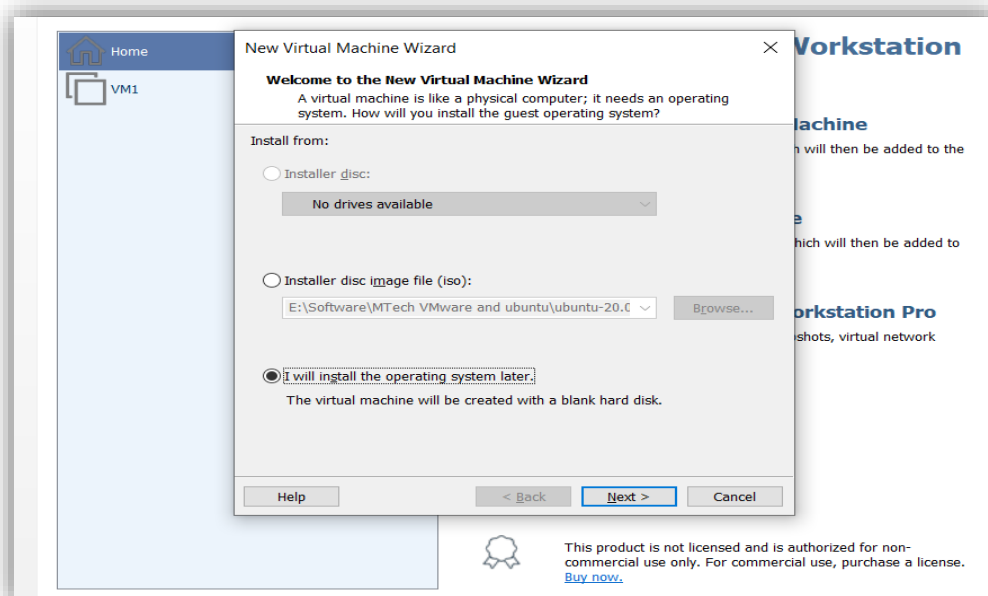
## 2. Steps and ScreenShots

### Steps:

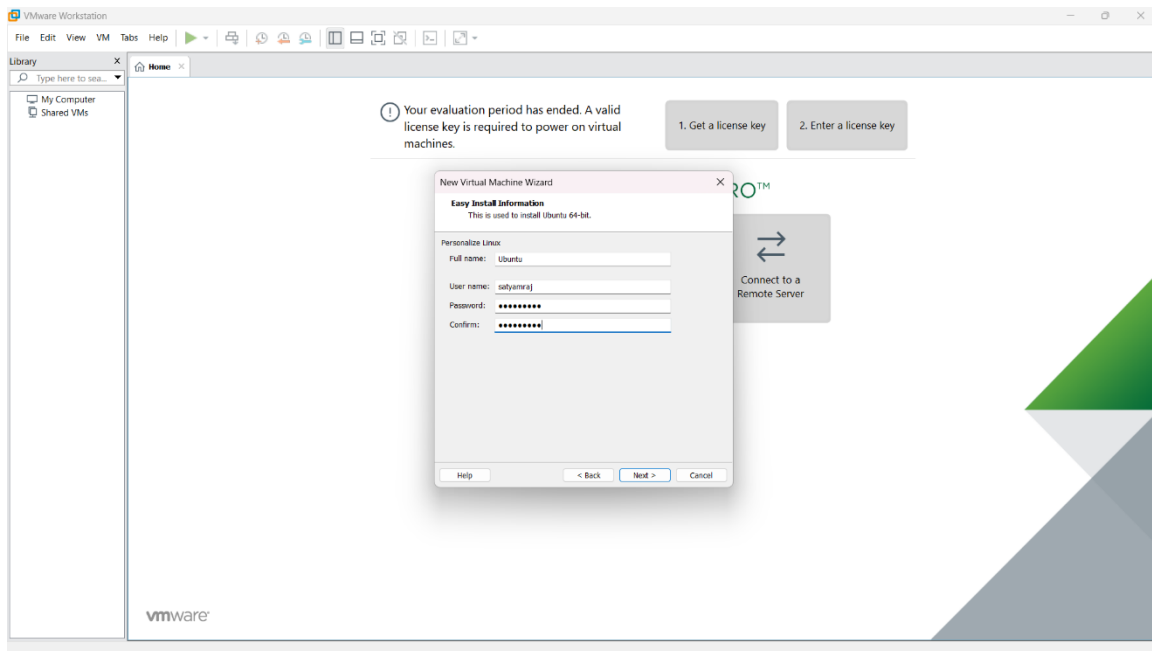
1. Open VMWare Player



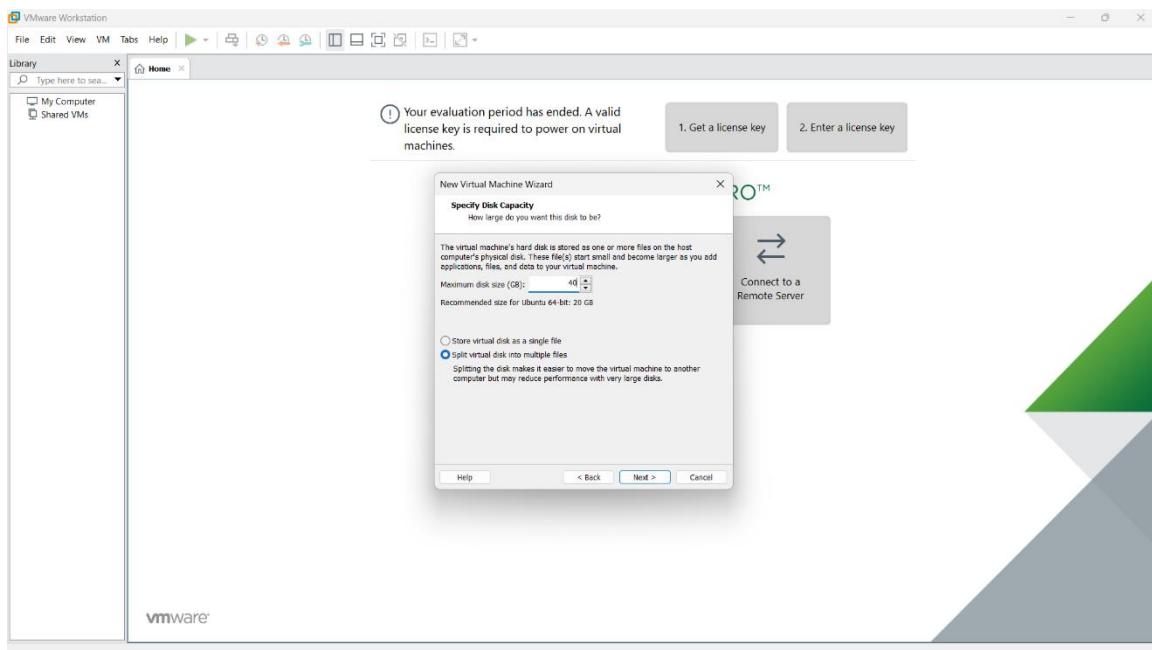
2. Click on create a New Virtual Machine
3. Click on Installer image file (iso)



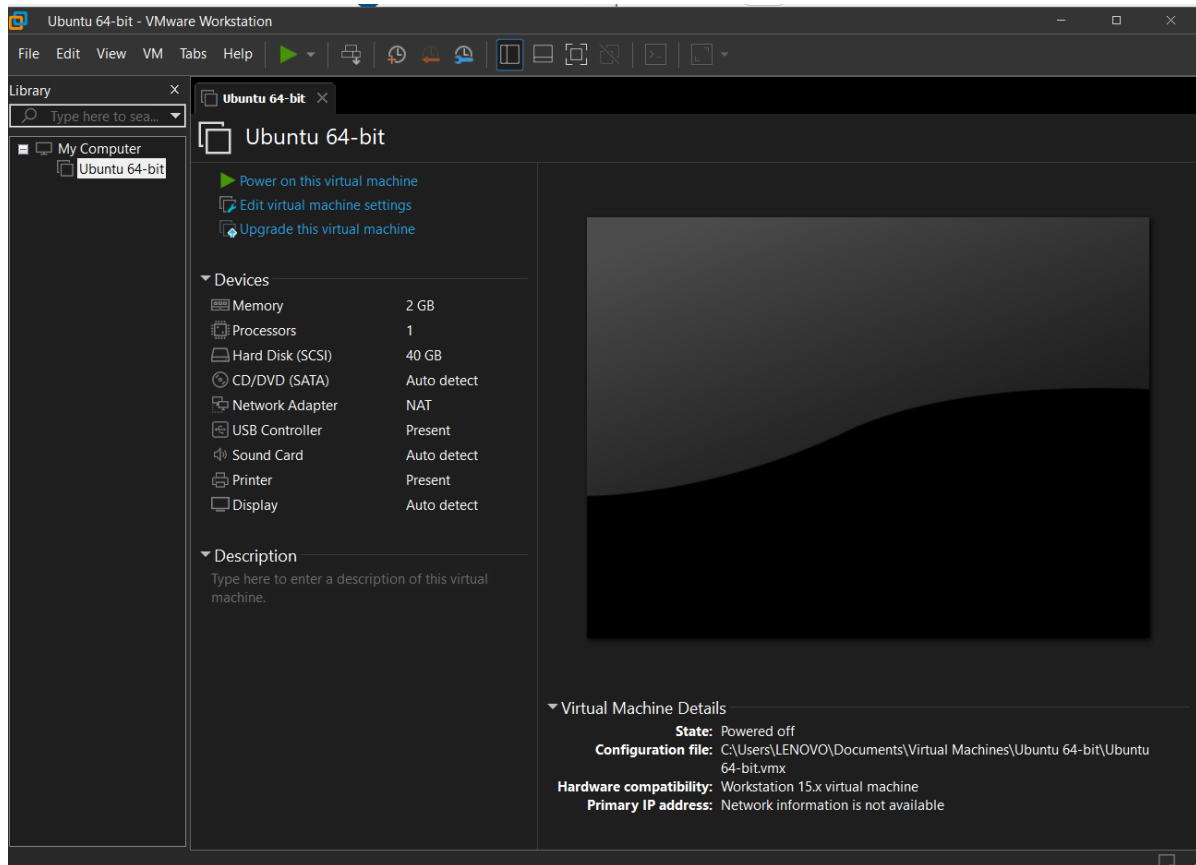
4. Click on browse- > Open :\\CSE software folder
5. Create user details login informations



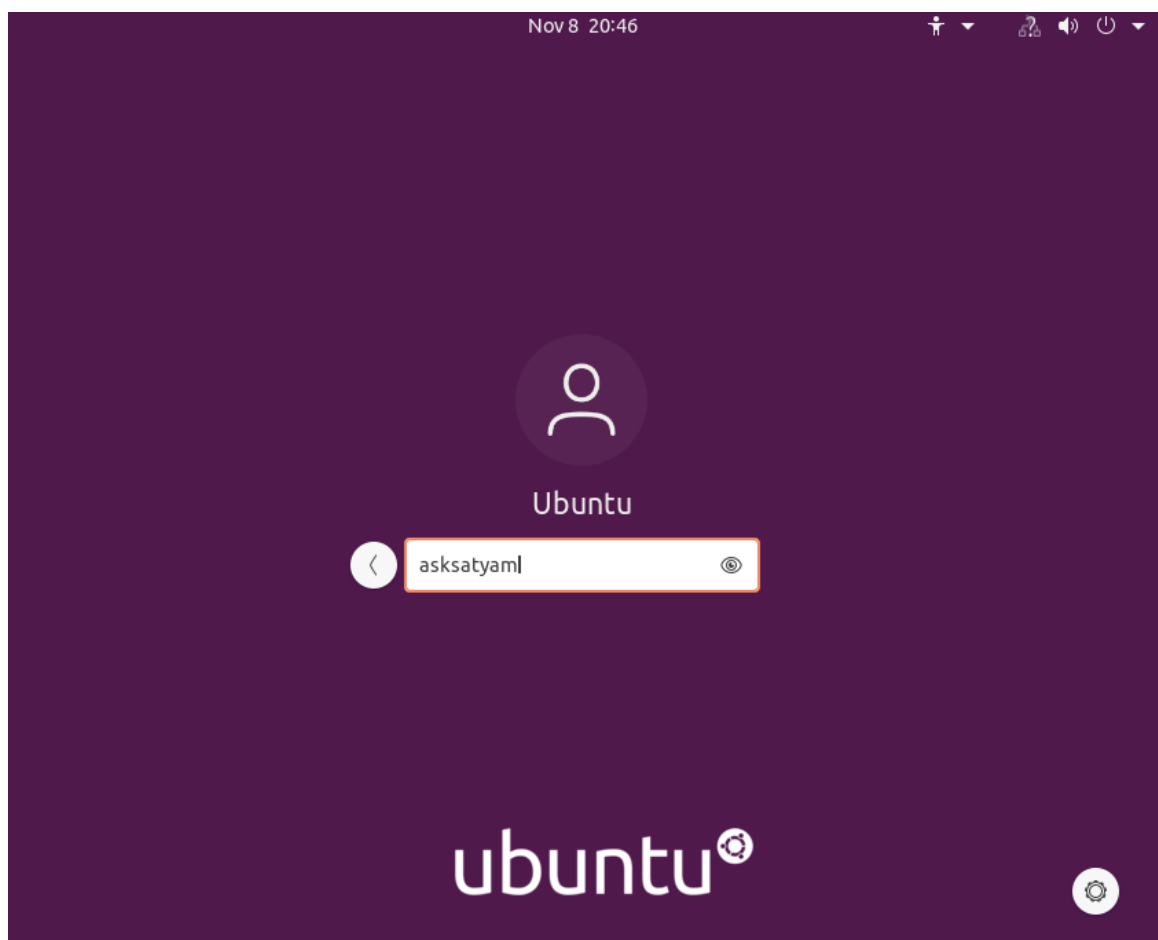
6. Configured RAM & ROM for Ubuntu in the virtual machine.



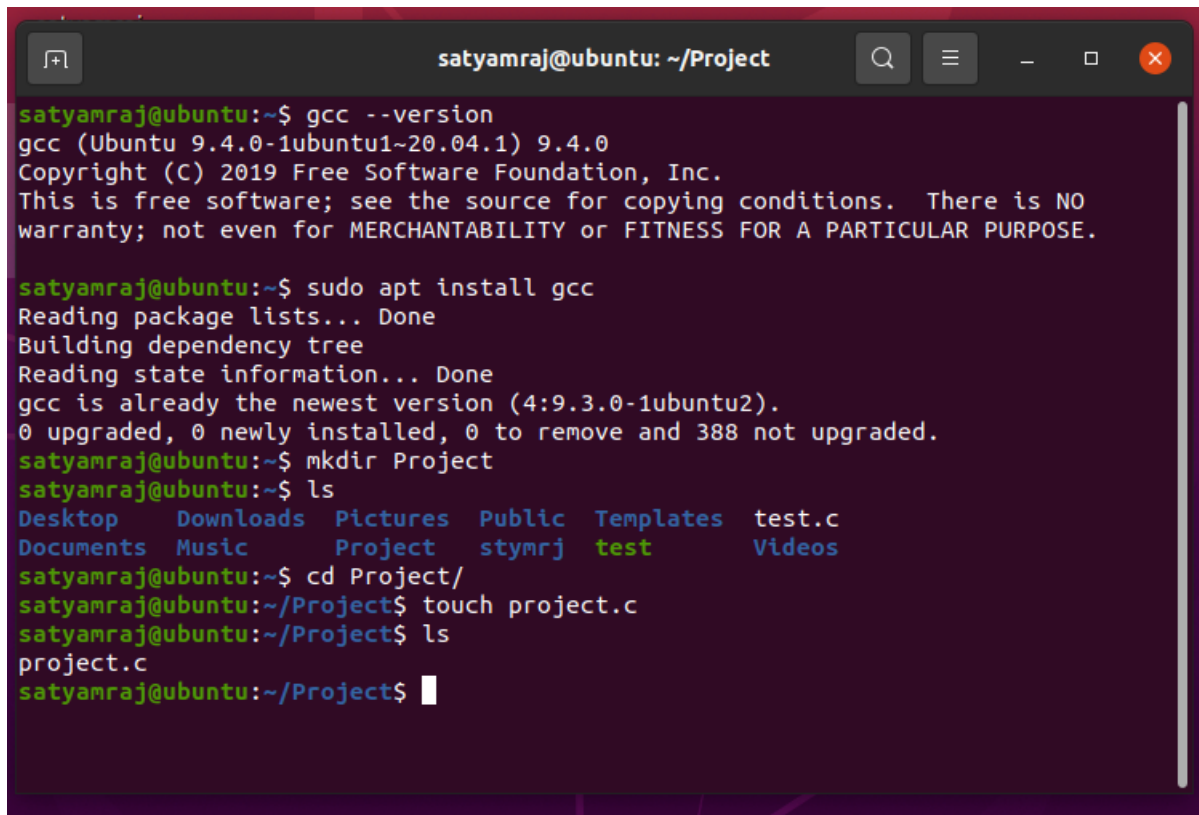
7. Successfully installed Ubuntu on VMPlayer



8. Logged into Ubuntu through my credentials



9. Checked if C is already installed or not ? and Created a Directory Named as “Project” and a c program file in this directory as “project.c”



```
satyamraj@ubuntu: ~/Project
satyamraj@ubuntu:~$ gcc --version
gcc (Ubuntu 9.4.0-1ubuntu1~20.04.1) 9.4.0
Copyright (C) 2019 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

satyamraj@ubuntu:~$ sudo apt install gcc
Reading package lists... Done
Building dependency tree
Reading state information... Done
gcc is already the newest version (4:9.3.0-1ubuntu2).
0 upgraded, 0 newly installed, 0 to remove and 388 not upgraded.
satyamraj@ubuntu:~$ mkdir Project
satyamraj@ubuntu:~$ ls
Desktop  Downloads  Pictures  Public  Templates  test.c
Documents  Music      Project  stymrj  test       Videos
satyamraj@ubuntu:~$ cd Project/
satyamraj@ubuntu:~/Project$ touch project.c
satyamraj@ubuntu:~/Project$ ls
project.c
satyamraj@ubuntu:~/Project$
```

10. Written a c program for a simple calculator in terminal using the command “ nano project.c”

### My C Code :

```
#include <stdio.h>
#include <math.h>
#include <stdlib.h>

int main()
{
    printf("\n\n\t*****\n\n");
    printf("\t\t\t::: PROJECT :::\n");
    printf("\t Name: SATYAM RAJ \n");
    printf("\t SAP ID: 1000015607 \n");
    printf("\t Roll No: 200102581 \n");
    printf("\t*****\n\n");
    // declaration of local variable op;
    int op, n1, n2;
    float res;
    char ch;
    do
```

```

{
    // displays the multiple operations of the C Calculator
    printf (" Select an operation to perform the calculation in C
Calculator: ");
    printf (" \n 1 Addition \t \t 2 Subtraction \n 3 Multiplication
\t 4 Division \n 5 Exit \n \n Please, Make a choice ");

    scanf ("%d", &op); // accepts a numeric input to choose the
operation

    // use switch statement to call an operation
    switch (op)
    {
        case 1:
            // Add two numbers
            printf (" You chose: Addition");
            printf ("\n Enter First Number: ");
            scanf (" %d", &n1);
            printf (" Enter Second Number: ");
            scanf (" %d", &n2);
            res = n1 + n2; // Add two numbers
            printf (" Addition of two numbers is: %.2f", res);
            break; // break the function

        case 2:
            // Subtract two numbers
            printf (" You chose: Subtraction");
            printf ("\n Enter First Number: ");
            scanf (" %d", &n1);
            printf (" Enter Second Number: ");
            scanf (" %d", &n2);
            res = n1 - n2; // subtract two numbers
            printf (" Subtraction of two numbers is: %.2f", res);
            break; // break the function

        case 3:
            // Multiplication of the numbers
            printf (" You chose: Multiplication");
            printf ("\n Enter First Number: ");
            scanf (" %d", &n1);
            printf (" Enter Second Number: ");
            scanf (" %d", &n2);
            res = n1 * n2; // multiply two numbers
            printf (" Multiplication of two numbers is: %.2f", res);
            break; // break the function

        case 4:

```

```

        // Division of the numbers
        printf (" You chose: Division");
        printf ("\n Enter First Number: ");
        scanf ("%d", &n1);
        printf (" Enter Second Number: ");
        scanf ("%d", &n2);
        if (n2 == 0)
        {
            printf (" \n Divisor cannot be zero. Please enter
another value ");
            scanf ("%d", &n2);
        }
        res = n1 / n2; // divide two numbers
        printf (" Division of two numbers is: %.2f", res);
        break; // break the function

    case 5:
        printf (" You chose: Exit");
        exit(0);
        break; // break the function

    default:
        printf(" Something is wrong!! ");
        break;
}
printf (" \n \n ***** \n");
} while (op != 7);

return 0;
}

```

Command for the Execution process for the code:

```

satyamraj@ubuntu:~$ cd Project/
satyamraj@ubuntu:~/Project$ nano project.c
satyamraj@ubuntu:~/Project$ rm project.c
satyamraj@ubuntu:~/Project$ ls
satyamraj@ubuntu:~/Project$ touch project.c
satyamraj@ubuntu:~/Project$ nano project.c
satyamraj@ubuntu:~/Project$ gcc project.c -o project
satyamraj@ubuntu:~/Project$ ./project

```

## Output :

```
satyamraj@ubuntu:~$ cd Project/
satyamraj@ubuntu:~/Project$ nano project.c
satyamraj@ubuntu:~/Project$ rm project.c
satyamraj@ubuntu:~/Project$ ls
satyamraj@ubuntu:~/Project$ touch project.c
satyamraj@ubuntu:~/Project$ nano project.c
satyamraj@ubuntu:~/Project$ gcc project.c -o project
satyamraj@ubuntu:~/Project$ ./project

*****
::: PROJECT :::
Name: SATYAM RAJ
SAP ID: 1000015607
Roll No: 200102581
*****

Select an operation to perform the calculation in C Calculator:
1 Addition                2 Subtraction
3 Multiplication          4 Division
5 Exit

Please, Make a choice 1
You chose: Addition
Enter First Number: 458
Enter Second Number: 210
Addition of two numbers is: 668.00

*****
Select an operation to perform the calculation in C Calculator:
1 Addition                2 Subtraction
3 Multiplication          4 Division
5 Exit

Please, Make a choice 2
You chose: Subtraction
Enter First Number: 54
Enter Second Number: 10
Subtraction of two numbers is: 44.00

*****
Select an operation to perform the calculation in C Calculator:
1 Addition                2 Subtraction
3 Multiplication          4 Division
5 Exit

Please, Make a choice █
```