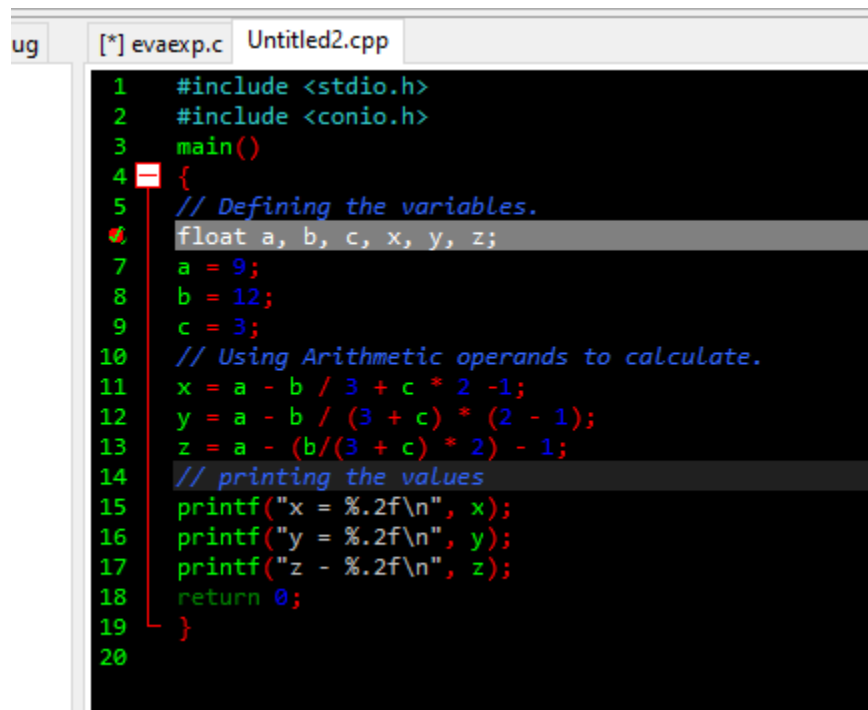


C Programming

Assignment 1

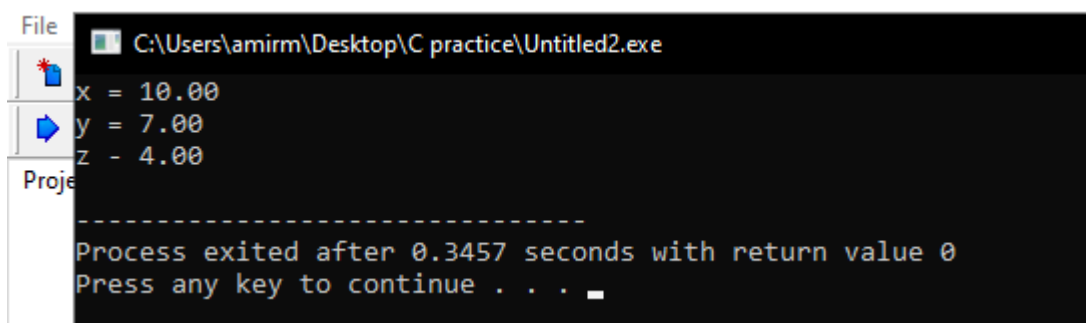
1. Write a c program to evaluate expressions.

Program

A screenshot of a code editor window with two tabs: "[*] evaexp.c" and "Untitled2.cpp". The code in the editor is a C program for evaluating expressions. It includes <stdio.h> and <conio.h>, defines a main function, declares float variables a, b, c, x, y, z, assigns values to a, b, and c, calculates x, y, and z using arithmetic operations, and prints the results using printf. The code is as follows:

```
1  #include <stdio.h>
2  #include <conio.h>
3  main()
4  {
5  // Defining the variables.
6  float a, b, c, x, y, z;
7  a = 9;
8  b = 12;
9  c = 3;
10 // Using Arithmetic operands to calculate.
11 x = a - b / 3 + c * 2 - 1;
12 y = a - b / (3 + c) * (2 - 1);
13 z = a - (b/(3 + c) * 2) - 1;
14 // printing the values
15 printf("x = %.2f\n", x);
16 printf("y = %.2f\n", y);
17 printf("z = %.2f\n", z);
18 return 0;
19 }
20
```

Output.

A screenshot of a console window showing the output of the C program. The window title is "C:\Users\amirm\Desktop\C practice\Untitled2.exe". The output displays the calculated values for x, y, and z, followed by a message indicating the process exited successfully and a prompt to press any key to continue. The output is as follows:

```
x = 10.00
y = 7.00
z = 4.00

-----
Process exited after 0.3457 seconds with return value 0
Press any key to continue . . .
```

2. Write a c program using getchar() and putchar() for character input and output.

Program

```
[*] evaexp.c  Untitled2.cpp  [*] Untitled3  Untitled4.cpp
1  #include<stdio.h>
2  #include<conio.h>
3  main ()
4  {
5      char in;
6      printf("Please enter a character : ");
7      in = getchar();
8      putchar (in);
9      return 0;
10
11
12 }
```

Output

```
C:\Users\amirm\Desktop\C practice\Untitled4.exe
Please enter a character : A
A
-----
Process exited after 4.155 seconds with return value 0
Press any key to continue . . .
```

3. Write a c program using gets() and puts() for string input and output?

Program

```
[*] evaexp.c  Untitled2.cpp  [*] Untitled3  Untitled4.cpp  Untitled5.cpp
1  #include<stdio.h>
2  #include<conio.h>
3  main()
4  {
5      char s[1000];
6      printf("Please enter a string or character : ");
7      gets(s);
8      printf("The entered string or character is : ");
9      puts(s);
10     return 0;
11
12
13 }
```

Output.

```
C:\Users\amirm\Desktop\C practice\Untitled5.exe
Please enter a string or character : My name is Amir Maharjan, kirtipur.
The entered string or character is : My name is Amir Maharjan, kirtipur.
-----
Process exited after 14.83 seconds with return value 0
Press any key to continue . . .
```

4. Write a c program to scan one character and two strings: one of 10-character length and another of 20-character length and print them.

Program.

```
1 #include<stdio.h>
2 #include<conio.h>
3 main()
4 {
5     char a;
6     char b[50];
7     char c[60];
8     printf("Enter a character : ");
9     scanf("%c %c %c", &a, &b, &c );
10    printf("The entered character are : \n");
11    printf("%c\n", a);
12    printf("%c\n", b);
13    printf("%c\n", c);
14    return 0;
15 }
16 }
```

Output

```
4 {
5 C:\Users\amirm\Desktop\C practice\Untitled8.exe
6
7 Enter a character : A
8 mY name is amir.
9 The entered character are :
10 A
11 á
12 α
13
14 -----
15 Process exited after 11.38 seconds with return value 0
16 Press any key to continue . . .
```