

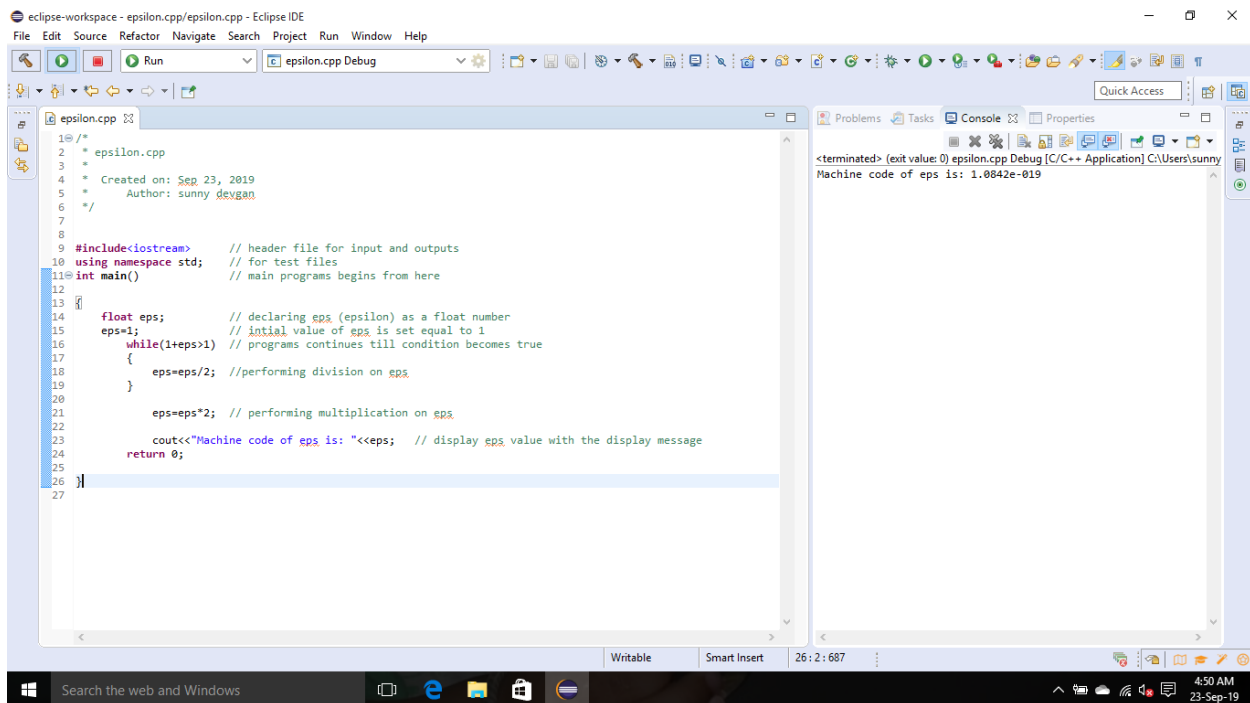
Lab Report #1

Group :

Sunny Devgan – c0752045

Varundeep Singh – c0754247

Source code:



The screenshot displays the Eclipse IDE interface. The main editor window shows the source code for `epsilon.cpp`. The code includes a header file `<iostream>` and uses the `std` namespace. The `main` function declares a float variable `eps` and initializes it to 1. It then enters a `while` loop that continues as long as `1+eps > 1`. Inside the loop, `eps` is divided by 2. After the loop, `eps` is multiplied by 2. Finally, the program prints the machine code of `eps` and returns 0.

```
1  /*
2  * epsilon.cpp
3  *
4  * Created on: Sep 23, 2019
5  * Author: sunny devgan
6  */
7
8
9  #include<iostream> // header file for input and outputs
10 using namespace std; // for test files
11 int main() // main programs begins from here
12 {
13     float eps; // declaring eps (epsilon) as a float number
14     eps=1; // initial value of eps is set equal to 1
15     while(1+eps>1) // programs continues till condition becomes true
16     {
17         eps=eps/2; //performing division on eps
18     }
19
20     eps=eps*2; // performing multiplication on eps
21
22     cout<<"Machine code of eps is: "<<eps; // display eps value with the display message
23     return 0;
24 }
25
26
27
```

The console window on the right shows the output of the program: `<terminated> (exit value: 0) epsilon.cpp Debug [C/C++ Application] C:\Users\sunny\... Machine code of eps is: 1.0842e-019`. The status bar at the bottom indicates the file is writable, smart insert is on, and the cursor is at line 26, column 2.

Flow chart:

