

Programming In C

Tutorial Four

30499

1. First Error - = operator is used in place of == in this statement.

Here's the correct condition.

```
if numNeighbors >= 3 || numNeighbors == 4
```

Second Error - There're no curly braces around the source code that should be executed if the condition is true.

Here's the correct source code.

```
if (numNeighbors >= 3 || numNeighbors == 4)
{
    ++numNeighbors;
    printf( " You are dead !\n" );
}
else
{
    --numNeighbors;
}
```

Third Error – Semicolon in the end of printf statement is the third error.
Here's the correct source code.

```
if ( numNeighbors >= 3 || numNeighbors == 4 )
{
    ++numNeighbors;
    Printf( " You are dead !\n");
}
Else
```

```

{
    --numNeighbors;
}

```

2. Output Of the Given Source Code – No, actually , I’m here !

When it comes to this poorly indented if statement , else statement isn’t affiliated with the accurate if statement.

At the end of the program, it prints “ No, actually, I’m here !” since this line isn’t affiliated with any if statement.

3. At first, if statement checks if “ doesSignificantWork” is true. And then if it’s true, the internal if statement checks if “ makesBreakthrough” is true.

After that, if it is true, the “ nobelPrizeCandidate “ will be true. When “ makesBreakThrough “ is false, then “ nobelPrizeCandidate” will be false.

If “ doesSignificantWork “ is false, then again, the else if statement will set “ nobelPrizecandidate “ to false.

As a consequence, here we can see the value of “ nobelPrizeCandidate “ always depend on the values of “ doesSignificantwork “ and “ makesBreakThrough” .

4.

- if (taxCode == 'T')


```

      {
          Price += price * taxRate;
      }
      
```

- ```
if (opcode == 1)
{
 double X,Y ;
 cin >> X >> Y ;
 cout << " The sum of X and Y is " << X+Y << endl;
}
```
- ```
if ( currentNumber % 2 == 1 )
{
    currentNumber = 3* currentNumber + 1;
}
else
{
    currentNumber /= 2;
}
```
- ```
if (year % 4 == 0 && (year % 100 != 0 || year % 400 ==0))
{
 leapYear = true;
}
```
- ```
if ( distance <= 100)
{
    cost = 5.00;
}
else if ( distance <= 500)
{
    cost = 8.00;
}
else if ( distance <= 1000)
{
    cost = 10.00;
```

```
}  
else  
{  
    cost = 12.00;  
}
```