

Tutorial No:04

Writing if condition

Question 01:

1. {} are not used properly in the if statement since there are more than one function within the if statement.
2. == sign should be assigned instead of = in the "numNeighbors=4"
3. To happen the correct indentation the printf() statement should be added to the code

The code should be corrected as below,

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

Question 02:

The output is ,

No, I'm here!

No, actually, I'm here!

Question 03:

If he or she does significant work and makes a break, then he or she will become a Nobel Prize candidate. If he or she does significant work but doesn't break through, then she or he will not be able to become a Nobel Prize candidate. And also, if she or he doesn't do significant work, he or she will not be able to become a Noble Prize candidate.

Question 04:

1.

```
#include <stdio.h>  
  
int main(){  
    char taxCode[2];  
    float price,taxRate=10;  
  
    printf("Enter the product price: ");
```

```

scanf("%f",&price);
printf("Enter the tax code:" );
scanf("%s",&taxCode);

if (strcmp(taxCode,"T")==0){
    price+=(price*taxRate)/100;
}

printf("The net price is %.2f ",price);
return 0;
}

```

2.

```

#include <stdio.h>

int main(){
    int opCode;
    double x,y,sum;

    opCode=1;
    x=2;
    y=2;

    if (opCode==1){
        sum=x+y;
    }
    printf("%.1lf",sum);

    return 0;
}

```

3.

```

#include <stdio.h>
int main(){
    int currentNumber;
    scanf("%d",&currentNumber);
    if (!(currentNumber%2==0)){
        currentNumber=(currentNumber*3)+1;
    }else{
        currentNumber/=2;
    }
    printf("%d",currentNumber);

    return 0;
}

```

4.

```
#include <stdio.h>
#include <stdbool.h>

int main(){
    bool leapyear;
    int year;
    scanf("%d",&year);
    if (year%4==0){
        leapyear=true;
        printf("true");
    }
    return 0;
}
```

5.

```
#include <stdio.h>

int main(){
    double cost;
    int distance;

    if (distance>0 && distance<=100){
        cost+=5;
    }else if(distance>100 && distance<=500){
        cost+=8;
    }else if (distance>500 && distance<1000){
        cost+=10;
    }else {
        cost+=12;
    }
    return 0;
}
```