## Programming with C Language

**Tutorial 03**

Q1. Write four different C statements that each add 1 to integer variable x.

Statement 1 – int x=0; x=x+1;
Statement 2 – int x=0; x+=1;
Statement 3 – int x=0; x++;
Statement 4 – int x; x=0+1;

Q2. Write a single C statement to accomplish each of the following:

a) Assign the sum of x and y to z and increment the value of x by 1 after the calculation.
z = x+y;x++;

b) Multiply the variable product by 2 using the *= operator.
product*=2;

c) Multiply the variable product by 2 using the = and * operators.
product=product*2

d) Test if the value of the variable count is greater than 10. If it is, print "Count is greater than 10."
if(count>10){printf("Count is greater than 10.");}

e) Decrement the variable x by 1, then subtract it from the variable total.
x++;y=total – x;

f) Add the variable x to the variable total, then decrement x by 1.
y=x+total; x--;

g) Calculate the remainder after q is divided by divisor and assign the result to q. Write this statement two different ways.
Divisor - d
First way – q=q%d;
Second Way – p=q%d;q=p;

h) Print the value 123.4567 with 2 digits of precision. What value is printed?
123.45

i) Print the floating-point value 3.14159 with three digits to the right of the decimal point. What value is printed?
3.141

Q3. Write single C statements that

a) Input integer variable x with scanf.
Scanf("%d",&x);

b) Input integer variable y with scanf.
Scanf("%d",&y);

c) Initialize integer variable i to 1
```
int i = 1;
.
```
d) Initialize integer variable power to 1.
```
Int power=1;
```

e) Multiply variable power by x and assign the result to power.
```
power = power*x;
```

f) Increment variable i by 1.
```
i=i+1;
```

g) Test i to see if it's less than or equal to y in the condition of a while statement.
```
while(i<=y)
```

h) Output integer variable power with printf.
```
printf("%d",power);
```