

# CMPE 101 - Intermediate Programming

## Worksheet(Week-02A)

### Part I

In this part you will learn primitive data types and variables. Please execute all expression line-by-line inside the **main** method and try to understand out puts. If you can't compile or execute, then try to fix out problems, then execute again!.

```
int a;
a= 12;
int b= 23;
c= a+b; // what is the out put of this line?
a= a+b; // a=?
int k;
3=k; // k=?
double s= 3.4;
double m;
m=2.3+S; // m=?

int t= 3;
int u=4;
int p= t/u; // p=?

boolean myFlag;
System.out.println(myFlag); //what is out put?
myFlag= 45; // myFlag=?
myFlag= T; //myFlag=?
myFlag= False; // what is the progrem of this expression.

char s= "b"; // s=?
char y='q'; // y=?
char z='ab'; // z=?

int r=5;
r=R+1; // r=?
int h1=r++; // h=?
int h2=++r; // h=? explain whay we have differen h1 and h2
int x1=r--;
int x2=--r;
```

```
int x=x-1; // explian x1,x2 and x3
```

```
int a6=7;
```

```
int a7= 43;
```

```
int a8= a7/a6; // a8=?
```

```
int a9= a7 % a6; // a9=?  explain a8 and a9
```

## Part II

In this part, you are asked to fix out problems if there is a problem. You may test this method inside the **main** to evaluate your comments. See the lecture examples.

```
public int add(int a, int b, int c){  
  
    int s=0;  
    s= a+b;  
    s= s+c;  
}
```

```
public void multiply(int a, int b) {  
  
    return a*b  
}
```

```
public short subtractNumbers (short a, byte b, float k ) {  
  
    return a+b-k;  
}
```

```
public double mixData(byte a, short b, int c, float d, long e){  
  
    return a+b+c+d+e;  
}
```

## Part III

Please write following function with a valid Java Method. suppose all variables are integers and the function returns a double data as a result.

$$f(x, y, z) = x^4 + x + 3y^3 - 100x^2 + z$$

$$f(x, y, z) = \frac{3x + 4y}{10z + 10x}$$