

# CMPE 101 - Intermediate Programming

## Worksheet(Week-02B)

### 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 t;
t= 120;
int b2= 23;
c= t+b2; // what is the out put of this line?
t= t+b; // t=?
int k;
30=k; // k=?
double j;
j= 3.4;
double m;
m=2.3+J; // m=?

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

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

char d= "a"; // s=?
char v='h'; // y=?
char c='ab'; // z=?

int n=5;
r=n+1; // r=?
int h1=n++; // h=?
int h2=++n; // h=? explain whay we have differen h1 and h2
```

```
int t6=7;
int t7= 43;
int t8= t7/t6; // t8=?
int t9= t7 % t6; // t9=? explain t8 and t9
```

## 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 long add(int a, int b, int c){

    int s=0;
    s= a+b;
    s= s+c;
}
```

```
public void multiply(int a, int b, short s) {

    return a*b*s
}
```

```
public short subtractNumbers (int a, byte, float k ) {

    return a+b-k;
}
```

```
public double mixData(byte a, short r, int c, float d, long e){

    return a+r+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.

$$f(x, y, z) = x^4 + 3y^3 - 100x^2 + z^4 \quad f(x, y, z) = \frac{10x}{10z + 10x + 4z}$$