Class and object

```
class Account {
  private double balance = 500.00;  // member data
  public double  getBalance(int x) {     // member method
    // logic here
    return balance;
  }

  public static void main(String[] args) {
    Account accnt = new Account();            // object creation
    double value = accnt.getBalance(123456);
    System.out.println("The balance is: " + value);
  }
}
```

Execution Result

Output:

```
The balance is: 500.0
```

Data types

```
class ScopeOfVariables {
  int i = 34;   // instance variable
  static int z; // class variable
  static {
    z = 10;
    System.out.println("inside static block: " + z);
  }
  void test() {
    int k = 200;  // local variable
    System.out.println("local variable: " + (k + i));
  }
  public static void main(String[] args) {
    ScopeOfVariables obj = new ScopeOfVariables();
    obj.test();
    System.out.println(obj.i);
  }
}
```

Output:
There is an error

Operators

```
class Account {
  public static void main(String[] args) {
    double balance = 600;
    System.out.println("Amount to withdraw");
    double amount = 1500;
    if(amount < 0 || amount > balance) {
      System.out.println("Withdrawal has failed");
    }
    else {
      balance -= amount;
      System.out.println("Withdrawal has succeeded");
    }
  }
}
```

Execution Result

Output:

```
Amount to withdraw
Withdrawal has failed
```

```
class Account {
  public static void main(String[] args) {
    double balance = 2000;
    System.out.println("Amount to withdraw");
    double amount = 500, limit = 10000, minbal = 500;
    if(amount <= limit && (balance - amount) > minbal) {
      balance -= amount;
      System.out.println("Withdrawal has succeeded");
    }
  }
}
```

Execution Result

Output:

```
Amount to withdraw
Withdrawal has succeeded
```

Type casting

```
class Calculation{
    public static void main(String[] args){
        double d = 234.04;
        long l = (long)d;   //explicit type casting
        int i = (int)l;     //explicit type casting
        System.out.println("double value " + d);
        System.out.println("long value " + l);
        System.out.println("int value " + i);
    }
}
```

Execution Result

Output:

```
double value 234.04
long value 234
int value 234
```

```
class Calculation{
    public static void main (String[] args) {
        int i = 300;
        long l = i;     //no explicit type casting
        float f = l;    //no explicit type casting
        System.out.println("int value " + i);
        System.out.println("long value " + l);
        System.out.println("float value " + f);
    }
}
```

Execution Result

Output:

```
int value 300
long value 300
float value 300.0
```