**What are the methods present in object class and their importance ?**

The Object class is present in “**java.lang**” package. Methods of Object class are as follows :-

1) **clone()** -- creates and returns a copy of this object.

signature of clone method :-

protected Object clone() throws CloneNotSupportedException

2) **equals()** -- indicates whether some other object is equal to this object.

signature of equals method :-

public boolean equals(Object obj)

3) **toString()** -- returns the string representation of this object.

signature of toString method :-

public String toString()

4) **finalize()** -- called by garbage collector on an object when garbage collection determines that there are no more references to the object.

signature of finalize method :-

protected void finalize() throws Throwable

5) **getClass()** -- returns the runtime class of an object.

signature of getClass method :-

public final class getClass()

6) **hashCode()** -- returns a hashcode value for the object, which is the object’s memory address in hexadecimal.

signature of hashcode method :-

public int hashCode()

7) **public final void notify()** -- wakes up a single thread waiting on this object’s monitor.

8) **public final void notifyAll()** -- wakes up all the threads waiting on this object’s monitor.

9) **public final void wait()** **throws InterruptedException** -- causes the current thread to wait until another thread notifies it.

10)  **public final void wait(long ) throws InterruptedException** -- causes the current thread to wait for specified milliseconds, until another thread notifies it.

11)  **public final void wait(long , int )** **throws InterruptedException** -- causes the current thread to wait for specified milliseconds and nanoseconds, until another thread notifies it.

**Override toString() method and return something meaningful.**

public class Employee {

public String id, name, address, gender;

public double salary;

public Employee(){

id = "Not Initialized";

name = "Not Initialized";

gender = "Not Initialized";

address = "Not Initialized";

salary = -1;

}

public Employee(String id){

this.id = id;

}

public Employee(String id, String name){

this(id);

this.name = name;

}

public Employee(String id, String name, String gender){

this(id, name);

this.gender = gender;

}

public Employee(String id, String name, String gender, String address){

this(id, name, gender);

this.address = address;

}

public Employee(String id, String name, String gender, String address, double salary){

this(id, name, gender, address);

this.salary = salary;

}

**public String toString(){**

**return "Employee Details\n----------------\nID : "+id+"\nName : "+name+"\nGender : "+gender+"\nSalary : "+salary+"\nAddress : "+address+"\n";**

**}**

}

class Test{

public static void main(String[] felight){

Employee e1, e2, e3, e4, e5;

e1 = new Employee("TDS1","Prashanth","Male","Kodihalli, Bengaluru", 1440000);

System.out.println(e1);

e2 = new Employee("TDS2","Venugopal","Male","Segehalli, Bengaluru.", 5050000);

System.out.println(e2);

e3 = new Employee("TDS3","Mahendar","Male","K R Puram, Bengaluru.", 3050000);

System.out.println(e3);

e4 = new Employee("TDS4","veerendar","Male","Whitefield, Bengaluru.", 2055400);

System.out.println(e4);

e5 = new Employee("TDS5","Ramanjaneya","Male","Marathahalli, Bengaluru.", 1550000);

System.out.println(e5);

}

}

