**JAVA OOPS**

QUES-1) WHAT IS INHERITANCE IN JAVA?

ANS) THE PHENOMENON/PROCESS IN WHICH THE CLASS ACQUIRE THE PROPERTIES AND BEHAVIOUR OF ANOTHER CLASS.

QUES-2) WHAT IS SUPER CLASS AND SUB CLASS?

ANS)

SUPER CLASS- IT IS ALSO KNOWN AS PARENT CLASS

SUB CLASS- IT IS ALSO KNOWN AS CHILD CLASS

THE SUB CLASS IS THE ONE WHICH INHERIT THE PROPERTIES AND BEHAVIOURS FROM SUPER CLASS

QUES-3) HOW IS INHERITANCE IMPLEMENTED IN JAVA?

ANS)

public class Animal {

    // in this example we are showing the single level inheritance

    int age;

    String name;

    void eating(){

        System.out.print("Animal is eating");

    }

    public static void main(String[] args) {

        dog d = new dog();

        d.age = 12;

        d.name = "Nitesh";

        d.eating();

    }

}

class dog extends Animal{

}

QUES-4) WHAT IS POLYMORPHISM?

ANS) EXISTING IN MANY FORM :-

1. COMPILE TIME POLYMORPHISM.
2. RUNTIME POLYMORPHISM.

QUES-5) DIFFERENCE BETWEEN METHOD OVERLOADING AND METHOD OVERRIDING?

ANS)

METHOD OVERLOADING- DIFFERNET ARGUMENT BUT SAME FUNCTION NAME, IN THIS WE ARE PASSING DIFFERENT ARGUMENTS TO THE SAME FUNCTION NAME.

METHOD OVERRIDING- HAVING SAME FUNCTION NAME BUT DIFFERENT METHODS INSIDE IT.

QUES-6) WHAT IS THE FINAL CLASS IN JAVA?

ANS) THE CLASS WHICH IS NOT INHERITED BY SOME OTHER CLASS.

QUES-7) WHAT IS ABSTRACTION IN JAVA? EXPLAIN WITH THE HELP OF EXAMPLE?

ANS)

ABSTRACTION- THE PROCESS IN WHICH WE HIDE THE ESSENTIAL DETIALS AND ONLY SHOW THE NECESSARY ITEMS TO THE USERS

|  |
| --- |
| Abstraction; |
|  | public abstract class Test { |
|  | abstract void run(); |
|  | abstract int no(); |
|  | } |
|  | class abhinav extends Test{ |
|  | int no(){ |
|  | System.out.println("i am in no method"); |
|  | return 0; |
|  | } |
|  | void run(){ |
|  | System.out.println("i am in abhinav class"); |
|  | // System.out.println(i); |
|  | } |
|  | } |
|  | class prashant extends Test{ |
|  | // int i = 20; |
|  | void run(){ |
|  | System.out.println("i am in run method"); |
|  | // System.out.println(i); |
|  | } |
|  | int no(){ |
|  | System.out.println("i am in no method"); |
|  | return 0; |
|  | } |
|  |  |
|  | public static void main(String [] args){ |
|  | // basically in this we have two method to create an object |
|  | //1. via creating object of the child class and call its method. |
|  | abhinav a = new abhinav(); |
|  | a.run(); |
|  | a.no(); |
|  |  |
|  | prashant p = new prashant(); |
|  | p.run(); |
|  | p.no(); |
|  |  |
|  | //2. via using the name of parent class and create the object of child class |
|  |  |
|  | // Test t = new abhinav(); |
|  | // t.run(); |
|  |  |
|  | // Test t1 = new prashant(); |
|  | // t1.run(); |
|  |  |
|  | } |
|  | } |

QUES-8) WHAT IS THE DIFFERENCE BETWEEN AN ABSTRACT METHOD AND FINAL METHOD IN JAVA?

EXPLAIN WITH THE HELP OF AN EXAMPLE?

ANS)

ABSTARCT METHOD- IN THIS METHOD WE HIDE THE ESSESNTIAL DETIALS AND ONLY SHOW THE NECESSARY THINGS REGARDING THE USER POINT OF VIEW.

FINAL METHOD- IN THIS NO OTHER METHODS WILL OVERRIDE THE METHOD.

QUES-9) DIFFERENCE BETWEEN ABSTRACTION AND ENCAPSULATION IN JAVA?

ANS)

ABSTRACTION- THE PROCESS OF HIDING NECESSARY DETAILS FROM THE USER, AND ONLY DISPLAY THE USER REQUIRED THINGS.

ENCAPSULATION – THE PROCESS OF BINDING DATA MEMBERS AND DATA FUNCTIONS IN A CAPSULE SO THAT BOTH OF THEM WILL WORK TOGETHER

QUES-10) DIFFERENCE BETWEEN RUNTIME AND COMPILE TIME POLYMORPHISM?

ANS)

COMPILE TIME POLYMORPHISM- THE POLYMORPHISM WHICH TAKES PLACE AT COMPILE TIME, THE COMPILER WILL TELL WHICH METHOD TO EXECUTE

FOR EG- METHOD OVERLOADING- SAME METHOD NAME BUT DIFFERENT PARAMTERS

RUNTIME POLYMORPHISM- THE POLYMORPHISM WHICH TAKES PLACE AT RUNTIME

FOR EG- METHOD OVERRIDING- IN THIS WE OVERRIDE THE METHOD IN CHILD CLASS VIA CHANGING THE BODY.