**Assignment - 9 (Encap.)**

Q1

Ans: binding of data and it’s corresponding methods into one single unit is called Encapsulation.

**Q2**

**Ans:** important features of encapsulation:

1. Hiding data.
2. security.
3. setters and getters.

Q3

Ans: getters : to set the data.

setters: to get the required data .

 class take {

    private int age;

    public int getAge() {

        return age;

    }

    public void setAge(int age) {

        this.age = age;

    }

    public String getName() {

        return name;

    }

    public void setName(String name) {

        this.name = name;

    }

    String name;

}

class Assing{

    public static void main(String[] args) {

        take obj=new take();

        obj.setAge(45);

        int res1=obj.getAge();

        System.out.println(res1);

    }

}

Q4

Ans: “this” keyword specify a instance variable inside the calling object while the name is same as local variable.

class En4{

    private String name;

   private int age;

    void setAge(int age){

        age=age;     // here jvm takes both the age as local variable.

    }

    int getAge(){

        return age;     // this age variale is instance variable so, it is equal to zero.

    }

    void setAge1(int age){

        this .age=age;

    }

    int getAge1(){

         return age;

    }

    public static void main(String[] args) {

        En4 obj =new En4();

        obj.setAge(60);

       int res1 = obj.getAge();

       System.out.println(res1);

        obj.setAge1(60);

        int res2=obj.getAge1();

        System.out.println(res2);

    }

}

Q5

Ans:

1. It private the data.
2. more flexibility as we have seters and getters.
3. easy to reuse as per requirement.

Q6

Ans: For achieving Encapsulation firstly we have to use private keyword to private the instance variables so that it can’t be access from outside of the class. now create object in another class which is main method class and then access the data from methods by calling that.

 class launch {

    private int age=45;

   public void show(){

        System.out.println(age);

    }

}

class En6{

    public static void main(String[] args) {

        launch obj=new launch();

        obj.show();

    }

}