PW ASSIGNMENT (OOPS Assignment)

QUESTION → How to create an object in JAVA?

Answer → by using new keyword we can create an object in java , we can create multiple object references of any class in java .

Example → Test obj = new Test();

So here “obj” is the object reference of test class in java .

QUESTION → What are different types of variable in java?

Answer → Variable in Java is a data container that saves the data values during Java program execution. Different types of variables in java are -->

- Local variables

```
class PWSKILL {
    public static void main(String[] args)
    {
        int var = 10; // Declared a Local Variable
        // This variable is local to this main method only
        System.out.println("Local Variable: " + var);
    }
}
```

- Instance variables

```
class PWSKILL{

    public String geek; // Declared Instance Variable

    public PWSKILL()
    { // Default Constructor

        this.pwskill= "Telusko sir"; // initializing Instance Variable
    }
```

```
//Main Method
    public static void main(String[] args)
    {

        // Object Creation
        PWSKILL name = new PWSKILL();
        // Displaying O/P
        System.out.println("Geek name is: " + name.pwskill);
    }
}
```

- Static variables

```
class PWSKILL{

  public static String geek = "Shubham Jain";         //Declared static
variable

    public static void main (String[] args) {

      //geek variable can be accessed without object creation
      //Displaying O/P

        System.out.println("Geek Name is : "+PWSKILL.geek);
    }
```

QUESTION → In which area memory is allocated for instance variable & local variable?

Answer → Local variables are stored in the Stack memory area. Heap is the memory area where the object and its instance references are stored.

QUESTION → What is method overloading in java?

ANSWER → When two methods having the same name , but having different parameters are called method overloading. Example-->

```
class  Multiply{
public int multiply(int a, int b)
    {
        int prod = a * b;
        return prod;
    }
public int multiply(int a, int b, int c)
    {
        int prod = a * b * c;
        return prod;
    }
}
Class Main{
public static void main(String[] args){
Multiply mul = new multiply();
Mul.multiply(10,5);            //this will give op as -->50
Mul.multiply(10,10,10);        // this will give op as -->1000
}
}
```