ASSIGNMENT
OOPS FUNDAMENTAL

Q.1 How to create an object in Java?

Ans. An Object is created in Java using the new keyword.

  Syntax-

  className objectName = new className();

Q.2 What is the use of new keywords in Java?

Ans. It is used to create java objects and allocate memory to them in heap.

Q.3 What are the different types of variables?

Ans. There are three types of variables:-

- Local variable
- Instance variable
- Static variable

Q.4 What is the difference between instance variables and local variables?

Ans. Instance variable-

- These variables are created at the time of object creation.
- These variables are stored in heaps.
- These variables can have default values.

  Local variable-

- The scope of these variables depends upon method.
- These variables are stored in stacks.
- These variables can't have default values.

Q.5 In which area memory is allocated for instance variable and local variable?

Ans. Instance Variable - Heap Memory

  Local Variable - Stack Memory

Q.6 What is method overloading?

Ans. Two or more functions having the same name but having different number of parameters or return type.

Example:-

```java
class Add{
    public int add(int num1,int num2){
        return num1+num2;
    }
    public int add(int num1,int num2,int num3){
        return num1+num2+num3;
    }
}
public class methodOverloading {
    public static void main(String[] args) {
        // create object of class
        Add a1=new Add();

        int res1=a1.add(5,4);
        System.out.println(res1);

        int res2=a1.add(5, 3,2);
        System.out.println(res2);
    }
}
```