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- 1. METHOD NOT ACCEPTING PARAMETER AND NOT RETURNING VALUE
- 2. METHOD NOT ACCEPTING PARAMETERS BUT RETURNING VALUE
- 3. METHOD ACCEPTING PARAMETER LIST BUT NOT RETURNING VALUE
- 4. METHOD ACCEPTING PARAEMTER LIST AND RETURNING VALUE

METHOD NOT ACCEPTING PARAMETER AND NOT RETURNING VALUE

```
import java.util.Scanner;

class Test1
{
    public static void main(String[] args)
    {
        add();
    }

    public static void add()
    {
        int a = 1, b = 2;
        int sum = a+b;

        System.out.println(sum);
    }
}
```

METHOD NOT ACCEPTING PARAMETERS BUT RETURNING VALUE

```
import java.util.Scanner;

class Test1
{
    public static void main(String[] args)
    {
        int result = add();
        System.out.println(result);
    }
}
```

```
public static int add()
{
    int a = 10, b = 20, c=30;
    int sum = a+b+c;
    return sum;
}
```

METHOD ACCEPTING PARAMETER LIST BUT NOT RETURNING VALUE

```
import java.util.Scanner;
class Test1
{
      public static void main(String[] args)
            add(10,20,30);
      }
      public static void add(int a, int b, int c)
      {
            int sum = a+b+c;
            System.out.println(sum);
      }
}
METHOD ACCEPTING PARAEMTER LIST AND RETURNING VALUE
import java.util.Scanner;
class Test1
      public static void main(String[] args)
            int result=add(10,20,30);
```

```
System.out.println(result);
}

public static int add(int a, int b, int c)
{
    int sum = a+b+c;
    return sum;
}
```

PRACTICE QUESTIONS

TASK-1

- 1. WRITE A PROGRAM ON METHOD ACCEPTING 2 INTEGER VALUES AND RETURNS A BOOLEAN VALUE
- 2. WRITE A PROGRAM ON METHOD ACCEPTS 1 DOUBLE VALUE AND 1 INTEGER VALUE AND RETURNS A CHAR VALUE
- 3. WRITE A PROGRAM ON METHOD ACCEPTS STRING VALUE AND RETURNING STRING VALUE
- 4. WRITE A PROGRAM ON METHOD ACCEPTING INTEGER VALUE, DOUBLE, STRING AND RETURNS A BOOLEN VALUE

TASK-2

- 1. WRITE A PROGRAM TO FIND THE NUMBER IS EVEN OR ODD USING METHODS AND YOU SHOULD READ THE NUMBERS FROM THE USER
- 2. WRITE A PROGRAM TO CALCULATE THE % OF STUDENTS MARKS USING METHODS , READ 4 MARKS VALUES FROM THE USER
- 3. WRITE A PROGRAM TO FIND THE GIVEN NUMBER IS PALINDROME OR NOT USING METHODS AND READ THE NUMBER FROM THE USER
- 4. WRITE A PROGRAM TO FIND THE NUMBER IS SPECIAL NUMBER OR NOT USING METHODS AND READ NUMBER FROM THE USER
- 5. WRITE A PROGRAM TO FIND THE GREATEST OF 3 NUMBERS USING METHODS AND READ THE NUMBERS FROM THE USER
- **6.** WRITE A PROGRAM TO FIND THE NUMBER IS ARMSTRONG NUMBER OR NOT USING METHODS AND READ THE NUMBER FROM THE USER

IMPORTANT CONCLUSIONS OF METHODS

- 1. THE PROCESS OF INVITING A METHOD OF IMPLEMENTATION IS CALLED METHOD CALLING/INVOKING
- 2. IF WE ARE DEFINING A METHOD AND NOT CALLING FOR IMPLEMENTATION THERE WILL NOT BE ANY COMPILATION ERROR BUT IF WE ARE CALLING A METHOD AND NOT DEFENING THAT METHOD THEN WE WILL GET COMPILATION ERROR

class Test1

```
{
    public static void main(String[] args)
    {
        m1();
    }
}
```

3. A METHOD CAN ACCEPT ANY NUMBER OF VALUES BUT IT CAN RETURN ONLY ONE VALUE

```
class Test1
{
    public static void main(String[] args)
    {
        int a = m1(1, 1.1, 'c', "BitsQ");
        System.out.println(a);
    }

    public static int m1(int a, double b, char c, String d)
    {
        return a;
    }
}
```

- 4. IT IS NOT MANDATORY FOR THE TYOE OF VALUE WHICH WE ARE PASSIG (PARAMETER LIST) TO BE SAME AS REUTRN TYPE OF METHOD.
- 5. THE RETURN STATEMENT SHOULD ALWAYS BE LAST STATEMENTS OF METHOD BODY, IF AT ALL WE WRITE ANY STATEMENT AFTER RETURN STATEMENT WE WILL GET COMPILATION ERROR

```
class Test1
{
    public static void main(String[] args)
    {
        int a = m1(1, 1.1, 'c', "BitsQ");
        System.out.println(a);
    }

    public static int m1(int a, double b, char c, String d)
    {
        return a;
        System.out.println("HI"); //unreachable statement error
    }
}
```

}

6. A METHOD CAN HAVE MULTIPLE RETURN STATEMENT IF WE ARE WORKING WITH ANY BRANCHING STATEMENT BUT IF WE WRITE MULTIPLE RETURN STATEMENTS INDEPENDENTLY WE GET COMPILLATION ERROR

```
class Test1
{
     public static void main(String[] args)
     {
          m1();
     }

     public static boolean m1()
     {
          return true;
          return false;
     }
}
```