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Assignment No : 02

Question No : 01

Create a class with a method which can calculate the sum of first n natural numbers which are divisible by 3 or 5.

Answer:

```
public static int calculateSum(int n) {  
    int sum=0;  
    for(int i=1;i<=n;i++) {  
        if(i%3==0 || i%5==0) {  
            sum+=i;  
        }  
    }  
    return sum;  
}
```

2 Create a class with a method to find the difference between the sum of the squares and the square of the sum of the first n natural numbers.

Answer:

```
public static int calculateDifference(int n) {  
    int pow=0;  
    int sum=0;  
    for(int i=0;i<=n;i++) {  
        sum+=i;  
        pow+=i*i;  
    }  
}
```

```
        return Math.abs((pow)-(sum*sum));  
    }  
}
```

Question No : 03

Create a method to check if a number is an increasing number

Answer:

```
static boolean checkNumber(int n) {  
    int len = Integer.toString(n).length();  
    int[] arr=new int[len];  
    int temp=n, i=0;  
    while(temp>0) {  
        int curr = temp%10;  
        arr[i] = curr;  
        temp/=10;  
        i++;  
    }  
    for(int j=0;j<len-1;j++) {  
        if(arr[j]<arr[j+1]) {  
            return false;  
        }  
    }  
    return true;  
}
```

4 Create a method to check if a number is a power of two or not

Answer:

```
static boolean checkNumber(int n) {  
    int sum=1;  
    while(sum<=n) {  
        if(sum==n) {  
            return true;  
        }else {  
            sum*=2;  
        }  
    }  
    return false;  
}
```

Question No : 05

Take Employee Info like empid, empname, empsal, empAdd, empGender, empEmail and display .

Answer:

```
static void employee() {  
    Scanner sc = new Scanner(System.in);  
    int empid=sc.nextInt();  
    int empname = sc.nextInt();  
    long empsal = sc.nextLong();  
    String empAdd = sc.nextLine();  
    char empGender = sc.next().charAt(1);  
    String empEmail = sc.nextLine();  
  
    System.out.println(empid + " "+empname+" "+empsal+" "+empAdd+"  
"+empGender+" "+empEmail);  
}
```

6 Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.

Answer:

```
class Sample{
    static void test(int a, int b) {
        System.out.println("Addition of two number: " +(a+b));
        System.out.println("Substraction of two number: " +(Math.abs(a-b)));
        System.out.println("Multiply of two number: " +(a*b));
        System.out.println("Division of two number: " +(a/b));
        System.out.println("Remainder of two number: " +(a%b));
    }
}

public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    Sample.averageElement(sc.nextInt(), sc.nextInt(), sc.nextInt());
}
}
```

Question No : 07

Write a Java method to find the smallest number among three numbers.

Answer:

```
static void maxelement(int a, int b, int c) {
    System.out.println(Math.max(a, Math.max(b, c)));
}
}
```

Question No : 08

Write a Java method to compute the average of three numbers.

Answer:

```
static void averageElement(int a, int b, int c) {
    System.out.println((float)(a+b+c)/3);
}
}
```