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WT LAB2

1. WAP to find the perimeter and area of a circle given a value of radius

```
import java.lang.Math;
import java.util.*;
public class Circle
{
	public static void main(String[] args)
	{
		double r;
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter the radius :");
		r  = sc.nextDouble();
		double peri = 2 * Math.PI *Math.pow(r,2);
		double area = Math.PI *r *r;
		System.out.println("Perimeter = "+ peri + "\n" + "Area = " +area);

	}
}
```

2. WAP to find the largest among three numbers x, y, and z. You should use if-then-else construct in Java.

```
import java.util.*;

public class Num
{
	public static void main(String[] args)
	{
		System.out.println("Enter three numbers :");
		Scanner sc = new Scanner(System.in);
		int a , b , c;
		a = sc.nextInt();
		b = sc.nextInt();
		c = sc.nextInt();
		int max = a;
		if(max < b)
		{
			max = b;
		}

		if(max < c)
		{
			max = c;
		}
		System.out.println("Largest Number = " + max);
	}
}
```

3.WAP to calculate sum of all the numbers divisible by 3 from 0 to n. Print the sum.

```
import java.util.*;

public class NumSum
{
	public static void main(String[] args)
	{
		System.out.println("Enter the limit :");
		Scanner sc = new Scanner(System.in);
		int n;
		n = sc.nextInt();
		int sum = 0;
		for(int i = 0 ; i <= n; ++i)
		{
			if(i % 3 == 0)
			{
				sum += i;
			}
		}
		System.out.println("Sum = "+sum);


	}
}
```

4. WAP to check whether the number is an Armstrong number or not.
Armstrong Number: A positive number is called an Armstrong number if it is equal to the sum
of cubes of its digits for example 153 = $1_3+5_3+3_3$, 370, 371, 407, etc.

```
import java.util.*;
import java.lang.Math;

class Armstrong_Number
{
	public static void main(String[] args)
	{
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter the number : ");
		int n = sc.nextInt();
		int rem ;
		int p = n;
		int sum = 0;
		while(p != 0)
		{
			rem = p % 10;
			sum += Math.pow(rem,3);
			p = p/10;
		}
		if(sum == n)
		{
			System.out.println("Armstrong number");
		}
```

```
            else
            System.out.println("Not an Armstrong number");
        }
}
```

5. WAP to find the highest mark and average mark secured by him in "5" number of subjects.

```
import java.util.*;
import java.lang.Math;

class marks
{
        public static void main(String[] args)
        {
                Scanner sc = new Scanner(System.in);
                int[] arr = new int[5];
                int sum = 0;
                System.out.println("Enter 5 elements in the array: ");
                for(int i = 0 ; i < 5; ++i)
                {
                        arr[i] = sc.nextInt();
                }
                int max = arr[0];
                for(int i = 0 ; i < 5; ++i)
                {
                        sum += arr[i];
                        if(arr[i] > max)
                        {
                                max = arr[i];
                        }
                }
                System.out.println("Max = " +max +"\n"+ "Average = " + sum/4);
        }
}
```