NAGARRO DSA PRACTICE – DAY-1 05 MAY 21

1. **Simple Interest (https://practice.geeksforgeeks.org/problems/simple-interest3457/1#submission)**

```
class Solution {
  public:
    double simpleInterest(int P, int R, int T) {
        double res=(double)(P*R*T)/100.00;
        return res;
        // code here
    }
};
```

2. Find Largest of N Numbers Easy (https://practice.geeksforgeeks.org/problems/largest-element-in-array4009/1)

```
class Compute {

    public int largest(int arr[], int n)
    {
        int max_n=arr[0];
        for(int i=1;i<n;i++)
        if(max_n<arr[i])
        max_n=arr[i];
        return max_n;
    }
}
```

Find the Highest number (https://practice.geeksforgeeks.org/problems/find-the-highest-number2259/1#)

```
class Solution
{
    public int findPeakElement(List<Integer> a)
    {
      int l=0;int r=a.size()-1;
      while(l<r)
      {
```

```
            int  mid=(l+r)/2;
             if(a.get(mid)>a.get(mid+1))
             r=mid;
             else
             l=mid+1;
          }
         return a.get(l);
        }
    }
```

3. https://practice.geeksforgeeks.org/problems/prime-number2314/1

```
class Solution{
    static int isPrime(int N){
        // code here
        if(N==1)return 0;
        if(N==2)
        return 1;
        for(int i=2;i*i<=N;i++)
        {
            if(N%i==0)
            return 0;
        }
        return 1;
    }
}
```

https://practice.geeksforgeeks.org/problems/find-prime-numbers-in-a-range4718/1

ye ques krna baki h

4. https://practice.geeksforgeeks.org/problems/mean0021/1

```
class Solution {
    static int mean(int N , int[] A) {
        // code here
        int sum=0;
```

```
        for(int i=0;i<N;i++)
        sum+=A[i];
        return sum/N;
    }
};
```

https://practice.geeksforgeeks.org/problems/nth-natural-number/1

ye krna h avi achha ques h

5. https://www.geeksforgeeks.org/program-to-find-the-roots-of-quadratic-equation/

```
import java.io.*;
import static java.lang.Math.*;
class Quadratic {



        static void findRoots(int a, int b, int c)
        {
                // If a is 0, then equation is not
                // quadratic, but linear

                if (a == 0) {
                        System.out.println("Invalid");
                        return;
                }

                int d = b * b - 4 * a * c;
                double sqrt_val = sqrt(abs(d));

                if (d > 0) {
                        System.out.println(
```

```
                    "Roots are real and different \n");

            System.out.println(
                    (double)(-b + sqrt_val) / (2 * a) + "\n"
                    + (double)(-b - sqrt_val) / (2 * a));
        }
        else if (d == 0) {
            System.out.println(
                    "Roots are real and same \n");

            System.out.println(-(double)b / (2 * a) + "\n"
                                        + -(double)b / (2 * a));
        }
        else // d < 0
        {
            System.out.println("Roots are complex \n");

            System.out.println(-(double)b / (2 * a) + " + i"
                                        + sqrt_val + "\n"
                                        + -(double)b / (2 * a)
                                        + " - i" + sqrt_val);
        }
}

public static void main(String args[])
{

        int a = 1, b = -7, c = 12;

        findRoots(a, b, c);
```

```
        }
}
```

6. https://practice.geeksforgeeks.org/problems/number-series3015/1

```
    class Solution {
  static int findNth(int n){
    // code here

    int temp=0;
    while(n%2==0)
    {
        temp++;
        n/=2;
    }return temp;
  }
}
```

7. https://practice.geeksforgeeks.org/problems/for-loop-primechecl/1

```
    string isPrime(int n)
    {
        if(n==1)return "No";
        if(n==2)return "Yes";
        for(int i=2;i<=sqrt(n);i++)
        {
            if(n%i==0)
            return "No";
        }
        return "Yes";
    }
```

8. https://practice.geeksforgeeks.org/problems/lower-case-to-upper-case3410/1

```
string to_upper(string str){
  //code
  for(int i=0;i<str.size();i++)
```

```
    str[i]=str[i]-32;
    return str;

}
```

Java:

```
class Solution
{
    String to_upper(String str)
    {
        StringBuilder ans =new StringBuilder();
        for(int i=0;i<str.length();i++)
        {
            ans.append((char)(str.charAt(i)-32));
        }
        return ans.toString();
    }
}
```

9. https://practice.geeksforgeeks.org/problems/reverse-an-array/0#

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

class GFG {
        public static void main (String[] args) {
                //code
                Scanner sc=new Scanner(System.in);
                int t=sc.nextInt();
                while(t-->0)
                {
                    int n=sc.nextInt();
```

```
                int arr[]=new int[n];
                for(int i=0;i<n;i++)
                {
                    arr[i]=sc.nextInt();

                }
                int i=0,j=n-1;
                while(i<j)
                {
                    int temp=arr[i];
                    arr[i]=arr[j];
                    arr[j]=temp;
                    i++;
                    j--;
                }
                for(i=0;i<n;i++)
                System.out.print(arr[i]+" ");
                System.out.println();
            }
        }
}
```

10. https://www.geeksforgeeks.org/fahrenheit-celsius-conversion/

```
class GFG {
static float Conversion(float n)
{
        return (n - 32.0f) * 5.0f / 9.0f;
}
public static void main(String[] args) {
        float n = 40;
        System.out.println(Conversion(n));
```

```
}
}
```

11. https://practice.geeksforgeeks.org/problems/celsius-to-fahrenheit-conversion5212/1#

```
class Solution{
    static double celciusToFahrenheit(int C) {
        // code here
        double f = (((C * 9.0)/ 5.0) + 32);
        return f;
    }
}
```