CSA0914- Java Programming

(1) write a Java Program to reverse the digits of a given number.

```
Public class Reversenumber{
    Public static void main (String[] args){
    Scanner s = new Scanner (System.in);
    int n = s.nextInt();
    int r=0;
    while (n!=0){
        int rev = n%10;
        r = r*10+rev;
        n = n/10;
    }
    System.out.println(r);
}}
```

Inputs

12345

Outputs

54321.

(2) An Armstrong number is one where the sum of the Cubes of its digits is equal to the number itself.

```
Public class Armstrong{
    Static int arms (int n){
    int rev, c=0;
    while (n! = 0){
        rev = n%10;
        int cv = rev * rev * rev;
```

```
            c + = cv;
            n = n/10;
        }
        return c;
}
Public Static void main (String [] args) {
    int n = 153;
    int re = arms(n);
    if (n == re) {
        System. Out. println ("Armstrong ");
    }
    Else {
        System. out. println ("Not Armstrong");
}}}
```

Output:

Armstrong

③ GCD of two Numbers:-

```
Public Class gcd {
    static int gc (int a, int b)
        while (a! = b) {
            if (a > b) {
                a = a - b;
            }
            if (b > a) {
                b = b - a;
            }
        }
        return a;
    }
    Public Static void main (String [] args) {
        int a = 10;
        int b = 15;
```

```java
        System.out.println (gc (a,b));
    }
}
```

3

④ Merge two Sorted Arrays using Java program.

```java
Public class merged
    Public Static int [] merge (int [] arr1, int [] arr2) {
        int n1 = arr1.length, n2 = arr2.length;
        int [] result = new int [n1+n2];
        int i=0; j=0, k=0;
        while (i<n1 && j<n2) {
            if (arr1[i] <= arr2[j]) {
                result [k++] = arr1[i++];
            } else {
                result [k++] = arr2[j++];
            }
        }

        while (i<n1) result [k++] = arr1[k++];
        while (j<n2) result [k++] = arr2[j++];
        result result;
    }
    Public Static void main (String [] args) {
        int [] arr1 = {1,3,5};
```

```java
    int [] arr2 = {2,4,6};
    System.out.println(Arrays.toString(merged));
  }
}
```

Output:

[1,2,3,4,5,6]

⑤ Write a java program for frequency of characteristics in a string:-

```java
Public class CharFrequency {
    Public class void count frequency (String str) {
        HashMap< Character, Integers> fre = new Hashmap<>();
        for(char c : str.toCharArray()){
            fre.put (c, f.getor Default (c,0)+1);
        }
        for (char C : fre keyset()){
            System.out.println(C + " : " + fre.get(C));
        }
        Public Static void main(String[] args) {
            String input = "hello";
            Count frequency (input)
        }
    }
```

Output:

h:1
e:1
l:2
0:1