CSA0985 Assignment - 1

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(12)

1) Sum of no upto n =

```
import java.util.*;
Public class Sum {
    Public static void main (String[] args) {
        int n = 10;
        int Sum = 0;
        for (int i=0; i<=n; i++) {
            Sum += i;
        }
        System.out.Println("Sum of numbers upto n is:" +Sum);
    }
}
```

Input n = 10
output = 55

2) Prime Number =

```
Public class PrimeNumber {
    Public Static Void main (String [] args) {
        int num = 29;
        boolean isPrime = True;
        for (int i=2; i<=num/2; i++) {
            if (num%i ==0) {
                isPrime = False;
                break;
            }
        }
```

```
if (isPrime && num > 1) {
    System.out.Println(num + "is a Prime number.");
} else {
    System.out.Println(num + " is not a Prime number.");
    }
  }
}
```

Input n = 3

output = Prime

3) Factorial of a Number.

```
class factorial {
  Public Static void main (String args[]) {
   int n = 6;
   int fact = 1;
   for (int i = 1; i <= n; i++) {
       fact = fact * i;
   }
   System.out.Println(fact);
  }
}
```

Input = 5!

output = 120

4) Reverse of a Number.

```
class Reverse of number {
    Public static Void main(String args[]){
int n = 341;
int rev = 0;
while (n>0) {
    i = n%.10;
rev = rev * 10 + i;
 n = n/10;
}
System.out.Println("Reverse number is :" rev);
}
}
```

output = 143.

5) Armstrong Number =

```
Class Armstrong {
  Public Static Void main (String args[]){
int n = 153;
int temp = n;
while (n>0) {
  i = n%.10;
Sum = Sum + i * i * i;
```

```
        n = n/10;
    }
    if (sum == temp){
        System.out.Println("Armstrong");
    }
    else
    {System.out.Println("Not an Armstrong");
    }
}
}
```

6) Palindrome =

```
class Palindrome{
    Public Static void main (String args[]){
        int n = 12321;
        int rev = 0;
        while (n>0){
            i = n%10;
            rev = rev * 10 + i;
            n = n/10;
        }
    if (rev == n)
        System.out.Println("Palindrome");
    else
        System.out.Println("Not Palindrome");
}
}
```

output = 12321
(Palindrome)

1. Sum of Digits.

```
Class Sum of Digits {
    Public Static Void main (String args [ ]) {
int n = 123;
int Sum = 0;
  while (n > 0) {
      i = n % 10;
      Sum + = i;
       n = n/10;
    }
   System.out.Println ("The sum is:" Sum);
  }
}
```

output - 6

8) Divisible by 5 and 7 upto n:

```
Class Divisibility {
      Public Static Void main (String args[ ]) {
int n = 100;
  for (int i = 1 ; i <= n; i++) {
       if (i % 5 == 0 & i % 7 == 0) {
         System.out.Println (i);
       }
    }
  }
}
```

9) Perfect Number.

```
class Perfect {
    Public static void main (String args[]) {
  int sum = 0;
  int n = 28;
 for (int i=1; i<n; it+) {
     if((n%.i) = =0) {
         Sum = Sum + i;
    }
 }if (Sum = =0) {
    System.out.Println ("Perfect");
 }else {
     System.out.Println ("Nope");
 }
}
```

10) Sum of Even - odd :

```
class Sum of Even odd {
    Public static void main (String args[]) {
        int n = 10; esum = 0; osum = 0;
  for (int i = 1; i<=n; it+) {
        if (i%.2 = = 0)
        { esum += i;
```

```
    }
    else {
        osum += i;
    }
    }
    System.out.Println("oddsum:" +o sum);
    System.out.Println("evensum:" (+e sum);
    }
}
```

11) Leap year

```
Class Leap year {
    Public Static Void main (String args[]){
        int year = 2024;
    if (year %.4 == 0 || year %.400 = 0 && year %.100 != 0){
        System.out.Print ln ("Leap year");
    }else
        {System.out.Println ("Not leap year");
        }
    }
}
```

output - Leap year

12) Even or Odd

```
class Even Odd {
    Public Static Void main (String argsC])){
     int n = 400;
    if (n % 2 ==0) {
     System. out Println ("Even");
    }
    else {System. out. Println ("add");
    }
}
}
```

output = Even

13) GCD and LCM

```
Class GCD and LCM {
    Public Static Void main (String argsC])){
  int a = 2;
  int b = 4;
  int temp;
while (b>0) {
      temp = b.
       b = a % b;
      a = temp.
  }
  int gcd = a;
```

```
        int LCM = (a*b)/gcd;
        System.out.Println("GCD", +gcd);
        System.out.Println("LCM" +LCM);
    }
}
```

14) Strong Number :

```
Class Strong number {
    Public Static Void main (String args []){
        int n =145;
        int Sum =0, rem, fact;
        int temp = n;
        while (n>0) {
            rem = n%.10;
            fact =1
            for (i=1; i<=n; i++){
                fact = fact * i;
            }
            Sum = Sum + fact;
            n = n/10;
        }
    if (Sum == temp) {
        System.out.Println("strong");
    }
    else {
        System.out.Println
            ("NOT");
    }
}
```

15) Celcius to Faricheat :-

```
Class Temperature {
    Public static void main (String args[]){

    double. Celsius = 39.0;
    double. farenheit = ((celsius * 9/5) + 32;
    System.out.Println (farenheit);
}
}
```

16) Faricheit to Celcius =

```
Class Temperature {
    Public Static void main (String args[]){

        double farenheit = 102.2;
        double Celsius = (farenheit - 32) + 5/9;
    System. out. Println (celsius);

}
}
```

17) Binary to Decimal.

```
class Binary_Decimal
  Public static void main(String args[]){
     String binarystring = "1010";
  int decimal = Integer.ParseInt(binary string, 2);
System.out.Println(decimal);
}
}
```

18) Decimal To Binary =

```
class Decimal_Binary {
  Public static void main(String argsC]){
       int decimal = 10;
      String binary = Integer.toBinary String(decimal);
      System.out.Println(Binary)
  }
}
```

19) Addition of 2 Numbers

```
Class Addition of 2 Numbers {
    Public Static Void main (String args[]){
        int a = 2;
        int b = 3;
        int c = a+b;
        System.out.Println ("sum is:" + c);
    }
}
```

output = 5

20) Subtraction of 2 Numbers

```
class subtraction of 2 Numbers {
    Public Static void main (String args[]){
        int a = 5;
        int b = 2;
        int c = a-b;
        System.out.Println ("subtraction is:" c);
    }
}
```

output = 3