Programming in Java For Web Applications

CSA-0985

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Date : 09/07/24.
Day : Tuesday.

10/10 good

1. Sum of Natural numbers upto n.

```
for (int i=0 ; i<=n; i++)
{
    sum+=i;
}
```

2. Given number is prime no or not:

```
for (int i=1 ; i<=n ;i++)
 {
   if (n%i ==0)
   {
     c++;
   }
 }
if (c ==2)
```

3. Find the factorial of n.

```
for int (i=1 ; i<=n ; i++)
  {
    b= b* i;
  }
```

4. Reverse the number.

```
while (n!=0)
{
   r= (r* 10) + (n% 10);
   n= n /10;
}
```

5. Armstrong Number:

```
while (n!=0)
{
   c++;
   n=n/10;
 }
n = temp ;
   while (n!=0)
    {
      m= m+ pow (n%10 ,c);
      n=n/10;
    }
```

Happy Number:

```
While (sum!=1 && sum!=4)
{
      sum = 0;
      while (n>0)
      { temp = n%10;
        sum = sum + (temp * temp);
        n= n/10;
      }
      n= sum;
}
```

Pallindrome:

```
while (a!=0)
{
  b= b* 10 + (a%.10);
  a= a /10;
}
```

8. Sum of the digits:

```
while (n!=0)
{ digit  =n %.10 ;
  sum += digit ;
  n /=10
}
```

9. Numbers divisible by 5 and 7:

```
If (n%.==5==0  and  n%.7 ==0)
{ Print ("divisible")
else
  print  Not [divisible]
```

10. Perfect number upto n.

```
for (int i=1. ; i<=n/2 ; i++)
{ if (n%. i==0
  sum += i
}
Return  sum == n.
```

11. GCD and LCM:

```
for (int i=1 ; i<=a && i<=b ; i++)
{ if (a%i ==0 && b%i==0)
  {
    gcd = i;
    lcm = (a*b)/i;
  }
}
```

12. Decimal to Binary.

```
while (n>0)
{
  b[index] = n%2;
  n/=2;
  index ++;
}
for (int i = index -1 ; i>=0 ; i--)
```

Binary to Decimal

```
while (n>0)
{
  rem = n%10;
  decimal = decimal + rem*base;
  n = n/10;
  base = base * 2;
}
```

Voting Eligibility:

```
If (age >=18)
  Printf ("You are eligible")
else
  Printf ("You are not eligible")
```

19. Sum of square root and cubic root numbers:

```
for (int i=0 ; i<=20 ; i++)
square = x*x ;
Cube   = x*x*x ;
Sum    = square + cube ;
```

20. Vowels and consonants:

```
for (int i=0 ; s[i] ; i++)
{
if ((s[i] >= 'a' && s[i] <= 'z') || s[i] >= 'A' && s[i] <= 'Z'))
{
if ((s[i] = = 'A' || s[i] == 'E' || s[i] == 'I' || (s[i] == 'O' || s[i] == 'U')
  (s[i] == 'a' || s[i] == 'e' || s[i] == 'i' || s[i] == 'o' || s[i] == 'u')

  v++ ;
else
  c++ ;
 }
}
```

14. Fibonacci:

```
while (n--)
{
  c=a+b;
  Print ("%d", c);
  a=b;
  b=c;
}
```

15. Celsius to Fahrenheit:

```
Celsius = 24
Fahrenheit = ((Celsius * 9) / 5) + 32;
```

6. Fahrenheit to Celsius:

```
Celsius = (Fahrenheit - 32) * 5/9;
```

1. Leap Year:

```
if (year % 400 == 0)
    Printf ("leap year");
elseif (year % 100 == 0)
    Printf ("Not a leap year")
elseif (year % 4 == 0)
    Printf ("leap year")
else
    Printf ("Not a leap year")
```