

## Assignment-2

```
1) class Abc
    { psum (String args[])
        { sop("Hello");
          sop("Anant");
        }
    }
```

2) To print sum of 2 no's.

Soln) 

```
int a, b;
int sum = a + b;
sop(sum);
```

3) To divide 2 no's and print on screen

Soln) 

```
int a, b;
a = sc.nextInt();
b = sc.nextInt();
int c = a / b;
sop(c);
```

4) WAP to print the result of operations

Soln) a) 

```
int c = (-5 + 8 * 6);
```

 o/p = 43  

```
sop(c);
```

b) 

```
int c = (55 + 9) % 9
```

 o/p = 0  

```
sop(c);
```

c) ~~```
int c = 20 + -3 * .
```~~  

```
int c = 20 + (-3 * 5) / 8
```

  

```
sop(c);
```

d)  $\text{int } c = 5 + 15 / 3 * 2 - 8 \% 3$   
Sop (c);

e) ~~so~~ ~~eg~~  $\text{int } a = 25, \text{int } b = 5;$   
 $\text{int } c = a * b;$   
Sop (c);

f)  $\text{int } a = \text{sc.nextInt}();$   
 $\text{int } b = \text{sc.nextInt}();$   
 $\text{int } c = a + b;$   
 $\text{int } d = a - b;$   
 $\text{int } e = a * b;$   
 $\text{int } f = a / 24;$   
 $\text{int } g = a \% b;$   
Sop (c + " " + d + " " + e + " " + f + " " + g);

7) WAP to print table of any no.

soln)  $\text{for } (\text{int } i = 1; i \leq 10; i++)$   
     $\{ \text{int } k = 8;$   
         $\text{int } x = k * i;$   
        Sop (k + " \* " + i + " = " + x);  
    }

9) ~~int~~ <sup>double</sup>  $c = ((25.5 * 3.5 - 3.5 * 3.5) / (40.5 - 4.5))$   
Sop (c); O/P = 2.1388.

10) ~~int~~ <sup>double</sup>  $c = 4.0 * (1 - (1.0/3) + (1.0/5) - (1.0/7) + (1.0/9) - (1.0/11))$   
Sop(c); // O/P = 2.976



11) ~~double~~ ~~int~~ ~~sc~~ ~~next~~ ~~int~~ ~~(i)~~; double x = sc.next + Double

double ~~int~~ a = 3.14 \* 21 \* 21;  
 Sout(a);  
 double ~~int~~ perimeter = 2 \* 3.14 \* 21;  
 Sout(perimeter);

12) ~~int a, b, c;~~ ~~int~~ ~~avg~~ ~~(a+b+c)/3;~~  
 double avg = (a+b+c)/3;  
 Sout(avg);

13) float w = 5.5, float h = 8.5  
 float a = w \* h;  
 float p = 2 \* (w + h);  
 Sout(p);  
 Sout(a);

14) ~~int i=1;~~  
 while (i >= 1 && i <= 9)  
 {  
 if (i % 2 == 1)  
 { for (int j = 1; j <= 6; j++)  
 {  
 Sout(" \* " + " ");  
 }  
 Soutln();  
 }  
 else  
 { Sout(" ");  
 for (int k = 1; k <= 5; k++)  
 { Sout(" \* " + " ");  
 }  
 Soutln();  
 }  
 i++;  
 }



Q19) WAP to convert decimal to binary

```
int n; int i=0; int arr[] = new int[100];
while (n>0)
{
    arr[i] = n%2;
    n = n/2;
    i++;
}
for (int j = i-1; j >= 0; j--)
{
    sop(arr[j]);
}
```

Q20) WAP to convert binary to decimal.

```
int n; int temp = n; int base = 1; int res = 0;
while (temp > 0)
{
    int last-digit = temp % 10;
    res = res + last-digit * base;
    base = base * 2;
}
sop(res);
```

Q21) WAP to convert decimal to octal.

```
int n; int i=0; int arr[] = new int[100];
while (n > 0)
{
    int last = n % 8;
    arr[i] = last;
    n = n / 8;
    i++;
}
```



```

for (int j=i-1; j>=0; j--)
{
    sop(arr[j]);
}

```

Q25)

John)

WAP to convert <sup>binary no</sup> ~~octal no~~ to decimal

```

int binary; int decimal = 0;
while (binary > 0)
{
    decimal = Math.pow(2, i++) * (binary % 10);
    binary = binary / 10;
}

```

String octal = Integer.toString(decimal); // Now it got converted to octal string  
 int x = Integer.parseInt(octal); // it will give octal no  
 sop(x)

Q26) WAP to convert decimal no to hexadecimal

John)

```

int n; char[] arr = new char[100];
int i = 0;

```

```

while (n > 0)
{

```

```

    int temp = n % 16;

```

```

    if (temp < 10)
    {

```

```

        arr[i] = (char)(temp + 48);
        i++;
    }

```

```

    else
    {

```

```

        arr[i] = (char)(temp + 55);
        i++;
    }

```

```

    }
    n = n / 16;
}

```



```
for (int j = i-1; j >= 0; j--)
{
    Sop ( arr[j] + " ");
}
```

Q25) WAP to Convert Octal no to a decimal no.

```
int n; int base = 1; int res = 0;
for (int i = 0; i < n.length(); i++)
{
    while (n > 0)
    {
        int last = n % 10;
        res = res + last * base;
        base = base * 8;
        n = n / 10;
    }
    Sop ( res );
}
```

Q26) WAP to convert binary no to hexadecimal no

```
int binary; int dec = 0;
while (binary > 0)
{
    dec = dec * 16 + (binary % 10);
    binary = binary / 10;
}
```

```
String Hexa = Integer.toHexString (dec);
Hexa = Hexa.toUpperCase();
Sop ( Hexa );
```

Q) WAP to print sum of binary no's

```

207.1) int num1, num2; int sum=0, carry;
int arr[] = new int[10];
for (j = arr.length-1; j >= 0; j--)
{
    int digit1 = num1%10;
    int digit2 = num2%10;
    num1 /= 10;
    num2 /= 10;
    sum = digit1 + digit2 + carry;
    if (sum == 0)
    {
        arr[j] = 0;
        carry = 0;
    }
    else
    {
        if (sum == 1)
        {
            arr[j] = 1;
            carry = 0;
        }
        if (sum == 2)
        {
            arr[j] = 0;
            carry = 1;
        }
        if (sum == 3)
        {
            arr[j] = 1;
            carry = 1;
        }
    }
    for (int i = 0; i < arr.length; i++)
    {
        sop(arr[i]);
    }
}

```