

① Aim: To write a java program to implement bubble sort on an array

Pseudo code:

- ① declare an array 'b' of size 20
- ② Declare i(int)
- ③ Create j a Scanner object for user input
- ④ Print "enter element"
- ⑤ And scan the a
- ⑥ Print the "number of array element";
- ⑦ for (i=0; i<a; i++)
- ⑧ scan the b into array then print b[i]
- ⑨ Arrays.sort(b, 0, a) and print ("sorted list");
- ⑩ using for (i=0; i<a; i++) then print b[i];

② Aim: To write a java program to find max-min in an array.

Pseudo code

- ① Declare an array 'arr[]' of size n
- ② Declare two variables 'min' and 'max'
- ③ get the array elements from the user using the for loop
- ④ set min = arr[0] and max = arr[0]
for each index 'i' from 1 to n-1

if $arr[i] < min$ then

set $min = arr[i]$

if $arr[i] > max$ then

set $max = arr[i]$

Print the min and max variables

③ Aim: To write a java program to find second min and max

Pseudo code:

- ① declare the array[] and min, max, sm, sn
smax
get the array elements from the user using
bop
find out min and max
for each index i from 1 to n-1
if $arr[i] < min$ and $min > sm, n$
 $sm = arr[i]$
if $arr[i] > max$ and $max > smax$ then
 $smax = arr[i]$
Print second min and second max

④ Aim: To write a java for pattern

Pseudo code:

initialize the variables i, j, n .

for i in range from n to 1

for j in range from 1 to i

print ("*")

Print ("\n")

⑤ Aim: To write a java program for perfect number

Pseudo code:

declare the variables $i, \text{sum} = 0$.

get the input number from the user.

find all the factors of the given number using for and if loop

for ($i = 1, i \leq n; i++$)

if ($n \% i == 0$)

add i to sum

if sum is equal to given number is perfect number

⑥ Aim : To write a java program for perfect number
Palindromes

Pseudo code

declare the Scanner class
get the input string from the user
using String Builder () function and reverse ()
function to reverse the string
Compare the Original and reversed string if equal
it is palindromo

⑦ Aim : To write a java program of Pseudo
Code for Armstrong or not

Pseudo code

declare the Scanner Class
get the input number from the user
store it in a temp variable.

```
while (a > 0)
{
    r = a % 10;
    sum += r * r * r;
    a = a / 10;
}
if (temp == sum)
    print ("Armstrong")
else print ("not Armstrong")
```

⑧ Aim: To write an Pseudo code for finding the volume of sphere

Pseudo code

declare the Scanner class

get the value volume (double) ^{int a}

Volume = Math.PI * $(4/3)$ * r * r * r

Print the value of volume

⑨ Aim: To write a Pseudo code for the power

Pseudo code:

declare the Scanner class to get the input

get the values of base and exponent

then power = Math.pow (base, exponent)

Print the value of power

⑩ Aim: To write pseudo code for performing Arithmetic operations.

Pseudo code:

declare the Scanner class to get input

get the operator and operand

if operator = sum

Print sum of given numbers

also it represents

find the value of number

the operation is

find the division of numbers

① Aim: To write Pseudo code for converting Binary to decimal number

Pseudo code

declare the Scanner class to get the input
get the input binary number from the user
while (bin > 0)

```
{  
    a = bin % 10;  
    dec += a * math.pow(10, i);  
    bin = bin / 10;  
    i++;  
}
```

display the decimal number

② Aim: To write Pseudo code for converting the data type.

Pseudo code

declare the variable
int a = 3;