1. Shell Script to display the first 10 natural numbers.

Expected Output :

1 2 3 4 5 6 7 8 9 10

#!/bib/bash

for i in {1..10}

do

echo -n $i

((i++))

Done

o-

12345678910

1. Shell Script to compute the sum of the first 10 natural numbers.

Expected Output :

The first 10 natural number is :

1 2 3 4 5 6 7 8 9 10

The Sum is : 55

#!/bin/bash

echo "the first 10 natural numbers is:"

for ((i=1; i<=10; i++));

do

echo -n $i

sum=$((sum+i))

done

echo "the sum is $sum"

o-

the first 10 natural numbers is:

12345678910

the sum is 55

1. Shell Script to display n terms of natural numbers and their sum.

Test Data : 7

Expected Output :

The first 7 natural number is :

1 2 3 4 5 6 7

The Sum of Natural Number upto 7 terms : 28

#!/bin/bash

read -p "Enter the number of terms:" n

echo "The first $n natural number is :"

for ((i=1; i<=n; i++));

do

echo -n "$i"

sum=$((sum+i))

done

echo -e "the sum of natural number upto $n terms is : $sum"

o-

Enter the number of terms:6

The first 6 natural number is :

123456the sum of natural number upto 6 terms is : 21

1. Shell Script to read 10 numbers from the keyboard and find their sum and average.

Test Data :

Input the 10 numbers :

Number-1 :2

...

Number-10 :2

Expected Output :

The sum of 10 no is : 55

The Average is : 5.500000

#!/bin/bash

sum=0

count=10

echo "Input 10 number"

for ((i=1; i<=count; i++));

do

read -p "number=$i" num

sum=$((sum+num))

done

avg=$(echo "scale=6; $sum/$count" | bc)

echo "the sum of count number is : $sum"

echo "the avg is $avg"

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Input 10 number

number=12

number=23

number=33

number=45

number=56

number=64

number=76

number=84

number=96

number=104

the sum of count number is : 43

the avg is 4.3

1. Shell Script to display the cube of the number up to an integer.

Test Data :

Input number of terms : 5

Expected Output :

Number is : 1 and cube of the 1 is :1

Number is : 2 and cube of the 2 is :8

Number is : 3 and cube of the 3 is :27

Number is : 4 and cube of the 4 is :64

Number is : 5 and cube of the 5 is :125

#!/bin/bash

echo "input number of terms"

read n

for ((i=1; i<=n; i++))

do

cube=$((i\*i\*i))

echo "number is $i and cube of $i is $cube"

done

o-

input number of terms

5

number is 1 and cube of 1 is 1

number is 2 and cube of 2 is 8

number is 3 and cube of 3 is 27

number is 4 and cube of 4 is 64

number is 5 and cube of 5 is 125

1. Shell Script to display the multiplication table for a given integer.

Test Data :

Input the number (Table to be calculated) : 15

Expected Output :

15 X 1 = 15

...

...

15 X 10 = 150

#!/bin/bash

echo "input number"

read num

for ((i=1; i<=10; i++))

do

result=$((num\*i))

echo "$num \* $i = $result"

done

o-

input number

5

5 \* 1 = 5

5 \* 2 = 10

5 \* 3 = 15

5 \* 4 = 20

5 \* 5 = 25

5 \* 6 = 30

5 \* 7 = 35

5 \* 8 = 40

5 \* 9 = 45

5 \* 10 = 50

1. Shell Script to display the multiplier table vertically from 1 to n.

Test Data :

Input upto the table number starting from 1 : 8

Expected Output :

Multiplication table from 1 to 8

1x1 = 1, 2x1 = 2, 3x1 = 3, 4x1 = 4, 5x1 = 5, 6x1 = 6, 7x1 = 7, 8x1 = 8

...

1x10 = 10, 2x10 = 20, 3x10 = 30, 4x10 = 40, 5x10 = 50, 6x10 = 60, 7x10 = 70, 8x10 = 80

#!/bin/bash

echo "input number starting from 1"

read n

echo "multiplication table from 1 to $n"

for ((i=1; i<=10; i++))

do

for ((j=1; j<=n; j++))

do

result=$((j \* i))

echo -n "$j \* $i = $result"

if [ $j -lt $n ];

then

echo -n ","

fi

done

echo

done

o-

input number starting from 1

8

multiplication table from 1 to 8

1 \* 1 = 1,2 \* 1 = 2,3 \* 1 = 3,4 \* 1 = 4,5 \* 1 = 5,6 \* 1 = 6,7 \* 1 = 7,8 \* 1 = 8

1 \* 2 = 2,2 \* 2 = 4,3 \* 2 = 6,4 \* 2 = 8,5 \* 2 = 10,6 \* 2 = 12,7 \* 2 = 14,8 \* 2 = 16

1 \* 3 = 3,2 \* 3 = 6,3 \* 3 = 9,4 \* 3 = 12,5 \* 3 = 15,6 \* 3 = 18,7 \* 3 = 21,8 \* 3 = 24

1 \* 4 = 4,2 \* 4 = 8,3 \* 4 = 12,4 \* 4 = 16,5 \* 4 = 20,6 \* 4 = 24,7 \* 4 = 28,8 \* 4 = 32

1 \* 5 = 5,2 \* 5 = 10,3 \* 5 = 15,4 \* 5 = 20,5 \* 5 = 25,6 \* 5 = 30,7 \* 5 = 35,8 \* 5 = 40

1 \* 6 = 6,2 \* 6 = 12,3 \* 6 = 18,4 \* 6 = 24,5 \* 6 = 30,6 \* 6 = 36,7 \* 6 = 42,8 \* 6 = 48

1 \* 7 = 7,2 \* 7 = 14,3 \* 7 = 21,4 \* 7 = 28,5 \* 7 = 35,6 \* 7 = 42,7 \* 7 = 49,8 \* 7 = 56

1 \* 8 = 8,2 \* 8 = 16,3 \* 8 = 24,4 \* 8 = 32,5 \* 8 = 40,6 \* 8 = 48,7 \* 8 = 56,8 \* 8 = 64

1 \* 9 = 9,2 \* 9 = 18,3 \* 9 = 27,4 \* 9 = 36,5 \* 9 = 45,6 \* 9 = 54,7 \* 9 = 63,8 \* 9 = 72

1 \* 10 = 10,2 \* 10 = 20,3 \* 10 = 30,4 \* 10 = 40,5 \* 10 = 50,6 \* 10 = 60,7 \* 10 = 70,8 \* 10 = 80

1. Shell Script to display the n terms of odd natural numbers and their sum.

test Data

Input number of terms : 10

Expected Output :

The odd numbers are :1 3 5 7 9 11 13 15 17 19

The Sum of odd Natural Number upto 10 terms : 100

#!/bin/bash

echo "input number of terms"

read n

sum=0

num=""

for ((i=1; i<=n; i++))

do

odd=$((2\*i - 1))

sum=$((sum=odd))

num="$num $odd"

done

echo "odd numbers are $num"

echo "the sum of odd numbers upto $n term = $sum"

o-

input number of terms

7

odd numbers are 1 3 5 7 9 11 13

the sum of odd numbers upto 7 term = 13

1. Shell Script to display a pattern like a right angle triangle using an asterisk.

The pattern like :

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