**DAY 2:**

1. **\***

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K=K+1

Print \*

K<=j

Initialize j=1 and k=1

Read N

true

j<=N

false

K=1,j=j+1

Algorithm:

Step 1: Start

Step 2: Read N

Step 3: if j<=n false then go to step

Step 4: check for k<=j if it is true go to step 5 otherwise go to step 6

Step 5: print \* and do k++

Step 6: do k=1,j=j+1 and repeat step 3

Step 7: stop

1. 1

2 3

4 5 6

7 8 9 10

Algorithm:

Step 1: do for x=1 to n

Step 2: do for y=1 to n

Step 3: print number

Step 4: Increase number ans y by 1

Step 5: go to next line

X++

Print \n

num++,y++

Print num

Initialize x=1 and y=1

Input the number of rows

Declare variables n,x,y, num =1

No

X<=n?

Yes

No

Y<=n?

Yes

1. Pascal triangle

1

1. 1
2. 2 1
3. 3 3 1

Algorithm:

Step 1: Start

Step 2: Declare variables x,y,n,a,z,s

Step 3: Enter the limit

Step 4: initialize the value of variables, s=n,x=0,y=0,z=s

Step 5: Do this following things in loop

1. x=0 to n
2. a=1,x++
3. z=s to 0
4. Print space
5. z—
6. y=0 to x
7. Print a
8. a=a\*(x-y)/(y+1)
9. y=y+1
10. Go to next line

Step 6: repeat the process to n

Step 7:print the final required triangle

Step 8: Stop.

Declare variable x,y,n,a,z,s

Print \n

Y=y+1

A=a\*(x-y)/(y+1)

Print a

Y<=x?

S--

Print Y

Z<=0?

A=1,x++

X<=n?

S=n,x=y=0,z=s

Enter the limit

No

Yes

No

Yes

No yes

1. Alphabet

E

D E

C D E

B C D E

A B C D E

Algorithm:

Step 1: Start

Step 2: declare the variables int i,j,n

Step 3: enter the number of lines, store it in n

Step 4: i=n

Step 5: repeat step 5 to 8 until i>=1

Step 6: repeat step 6 to 7 until j<=n

Step 7: print the character(j+64)

Step 8: go to another line

Step 9: end

Declare variable i,j,n

Enter the num of line

no

i>=1

J<=n

yes

no

1. Number

11111

11111

11111

Algorithm:

Step 1: start

Step 2: declare integer variables rows,i=1,j=1

Step 3: print 5 times ‘1’ in a row

Step 4: repeat steps 4 to 7 until i>=rows

Step 5: repeat steps 5 to 6 until j>=5

Step 6:print 1

Step 7: go to new line

Step 8: end

Declare variable i=1,j=1

Print 5 times ‘1’

j>=5,i>=rows

no

yes

Print1

1. Number pattern

Algorithm:

Step 1: Start

Step 2: declare integer variable i,j

Step 3: initialize i=1, j=1

Step 4: repeat the steps 4 to 9 until i>=1

Step 5: repeat steps 5 to 7 until j<=i

Step 6: print j

Step 7: increment j

Step 8: go to next line

Step 9: decrement i

Step 10: end

Declare variable i,j as init

start

Initialize I and j =1

i>=1

No yes

i++

j--

Print \n

Print j

J<=i

yes

No yes