

1. Write a C program to print the following pattern.

```
*
*
* $ *
**
**
* $ * $ * $
***
***
***
* $ * $ * $ * $
****
****
****
****
* $ * $ * $ * $ * $
```

2. Write a C program to print the following pattern.

```
* *
* _ * _
* * * *
* _ * _ * _ * _
* * * * *
* _ * _ * _ * _ * _
* * * * *
* _ * _ * _ * _ * _
```

3. Write a C program to print the following pattern.

```
*
$*$*
* * *
$*$*$*$*
* * * * *
$*$*$*$*$*$*
```

4. Write a C program to print the following pattern.

```
      *
     * 2
    * 2 *
   * 2 * 2
  * 2 * 2 *
 * 2 * 2 * 2
* 2 * 2 * 2
```

5. Write a C program to print the following pattern.

```
2 2 2 2 2 2
 * * * * *
 2 2 2 2
  * * *
   2 2
    *
```

6. Write a C program to print the following pattern.

```
a
Bc
DeF
gHiJ
kLmNo
```

7. Write a C program to print the following pattern.

```
* * * * *
*
* * * * *
* *
* * * * *
* * *
* * * * *
* * * *
* * * *
* * * *
* * * *
* * *
* * * * *
*
```

8. Write a C program to print the following pattern.

```
1
1 2
2
2
3 4 5
3
3
3
6 7 8 9
```

11) Print this pattern.

[illegible]

12) print this pattern.

*
* ^*
* ^* *
* ^* * ^*
* ^* * ^* *
* ^* * ^* * ^*
* ^* * ^* * ^* *
* ^* * ^* * ^* * ^*
* ^* * ^* * ^* * ^* *
* ^* * ^* * ^* * ^* * ^*
* ^* * ^* * ^* * ^* * ^*
* ^* * ^* * ^* * ^* * ^*
* ^* * ^* * ^* * ^* *
* ^* * ^* * ^*
* ^* * ^* *
* ^* *
* ^*
*

13) Print this pattern using c programming.

```
  1
 2 3 2
3 4 5 4 3
4 5 6 7 6 5 4
5 6 7 8 9 8 7 6 5
```

14) print this pattern using c programming.

```
*_**_
*_**_
*_*
*_*
*_
*
*_
*_*
*_**_
*_**_
*_**_
```

15) print this pattern using c programming.

```
*      *
**     **
* * * *
*  *  *
* * * *
**     **
*      *
```

16) print this pattern using c programming.0

```
0
1 0 1
2 1 0 1 2
3 2 1 0 1 2 3
4 3 2 1 0 1 2 3 4
5 4 3 2 1 0 1 2 3 4 5
```

17) print this pattern using c programming.

```
3
6 9
12 15 18
21 24 27 30
70 63 56 49
42 35 28
21 14
7
```

18) print this pattern using c programming.

```
      *
    *  *
  *      *
*          *
*          *
*          *
* * * * *
* * * * *
* * * * *
* * *
```

19) print this pattern using c programming.

```
1  1
2  2
3  3
4 4
5
4 4
3  3
2  2
1  1
```

20) print this pattern using c programming.

```
*****
*   *
*   *
*   *
*****
```

21) print this pattern using c programming.

```
*****
****  ****
***   ***
**    **
*     *
*     *
**    **
***   ***
****  ****
*****
```

22) print this pattern using c programming.

```
*****
*****
***
**
*
**
***
****
*****
```

23) print this pattern using c programming.

```
*****
*      *
*      *
*      *
*****
```

24) print this pattern using c programming.

```
*
*1*
*121*
*12321*
*1234321*
*123454321*
*1234321*
*12321*
*121*
*1*
*
```


25) print this pattern using c programming.

```
*           *  
*  *       *  *  
*      *  *      *  
* * * * * * * *
```

26) print this pattern using c programming.

```
*  A  *  B  *  
*  C  *  D  
*  E  *  
*  F  
*  
*  G  
*  H  *  
*  I  *  J  
*  K  *  L  *
```

27) print this pattern using c programming.

1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

6 6 6 6 6 6

28) print this pattern using c programming.

*

A

*B*C*

*D*E*F*

29) print this pattern using c programming.

30) print this pattern using c programming.

1

121

12321

1234321

123454321

12345654321

31) print this pattern using c programming.

5

4 5

3 4 5

2 3 4 5

1 2 3 4 5

32) print this pattern using c programming.

```
    1
  1 2 3
1 2 3 4 5
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8 9
  1 2 3 4 5 6 7
    1 2 3 4 5
      1 2 3
        1
```

33)print this pattern using c programming.

ABCDEFGFGFEDCBA

ABCDEF FEDCBA

ABCDE EDCBA

ABCD DCBA

ABC CBA

AB BA

A A

35)print this pattern using c programming.

```
  *
 * *
*  *
*  *
*  *
*  *
*  *
*  *
*  *
*
```

39)print this pattern using c programming.

```
A
1 1
B B B
2 2 2 2
C C C C C
```

42) print this pattern using c programming.

```
C
CO
COM
COMP
COMPU
COMPUT
COMPUTE
COMPUTER
```

43) print this pattern using c programming.

```
H
HE
HEL
HELL
HELLO
HELL
HEL
HE
H
```

44) print this pattern using c programming.

```
3
6 5
9 10 12
15 15 18 20 21
24 25 27 30 30 35
```

1. Write a program to find the Kth largest and Kth smallest element in an array.
2. Write a program to replace all even numbers in an array with \$ and print the array in descending order.
3. Write a program to replace all odd numbers in an array with & and print the array in reverse order.
4. Write a program to store even numbers and odd numbers in separate arrays.
5. Write a program to print array elements in reverse order and find the 2nd largest number.

6. Write a program to print alternate elements in an array.
7. Write a program to find the 2nd smallest element in an array.
8. Write a program to find the count of unique elements in an array and also find its sum.
9. Write a program to print the array by skipping two values next to the multiples of 5.
10. Write a program to find the sum of array elements except odd numbers which are divisible by 2.
11. Write a program to find the sum of array elements except even numbers which are multiples of 4.

12. Write a program to find the sum of array elements except prime numbers.
13. Write a program to find the sum of array elements which are multiples of 3 and also find prime numbers.
14. Write a program to find the sum of array elements which are multiples of 2 and divisible by 4.
15. Write a program to find the sum of array elements which are multiples of 10 and store the elements into a new array.
16. Write a program to replace multiples of 5 with # and replace the numbers which are divisible by 7 with '+'

17. Write a program to replace multiples of 3 with * and multiples of 7 with #.

18. Write a program to replace multiples of 4 with * and multiples of 6 with \$.

19. Write a program to find the most repeated element in an array.

20. Write a program to find the array element closest to zero.

21. Write a program to delete all duplicate elements from an array and reverse the array after deleting.

22. Write a program to insert element in an array at specified position

23. Write a program to print all negative elements in an array.

24. Write a program to count the total number of negative elements in an array and find out the sum of positive numbers in the array.

25. Write a program to replace all Even numbers by 0 and Odd numbers by 1.

26. Write a program to replace all prime numbers by 0 and non-prime numbers by 1.

27. Write a program to sort in descending order and reverse an array.
28. Write a program to sort elements of an array in ascending order and delete duplicate elements.
29. Write a program to sort elements of array in descending order and replace elements at odd positions with *.
30. Write a program to find the average of negative and positive numbers in an array.
31. Write a program to separate positive and negative numbers in separate arrays.

32. Write a program to count the total number of unique elements in an array.

33. Write a program to delete all prime numbers in an array and find out the sum of array elements after deleting.