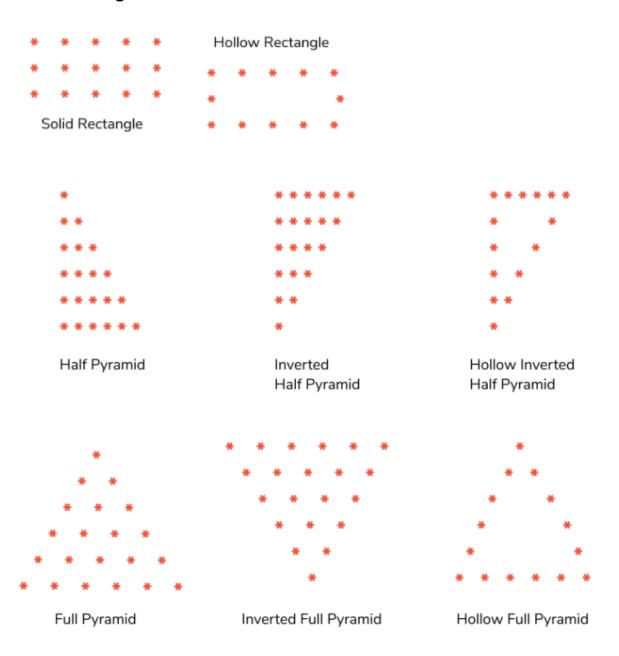
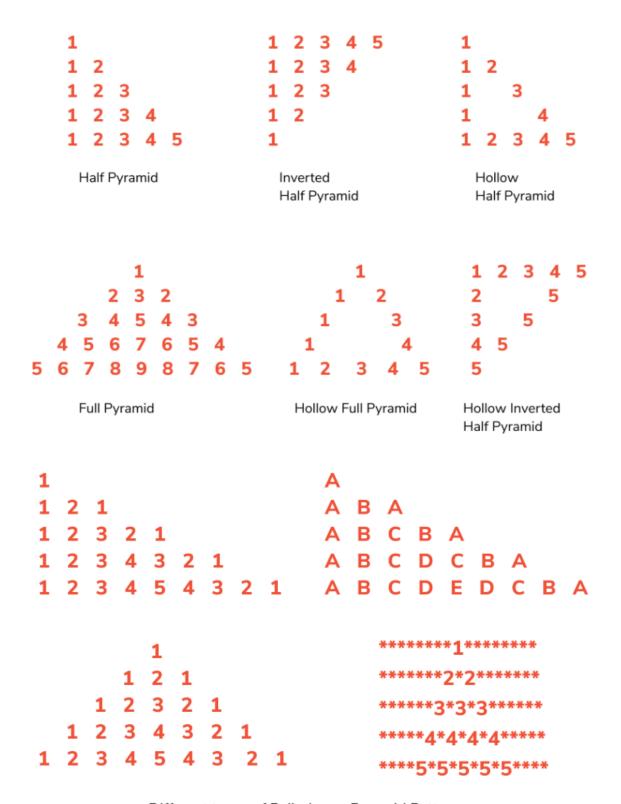
#### **Program on Looping**

- 1. Write a C program to print all natural numbers from 1 to n. using while loop
- 2. Write a C program to print all natural numbers in reverse (from n to 1). using while loop
- 3. Write a C program to print all alphabets from a to z. using while loop
- 4. Write a C program to print all even numbers between 1 to 100. using while loop
- 5. Write a C program to print all odd number between 1 to 100.
- 6. Write a C program to find sum of all natural numbers between 1 to n.
- 7. Write a C program to find sum of all even numbers between 1 to n.
- 8. Write a C program to find sum of all odd numbers between 1 to n.
- 9. Write a C program to print multiplication table of any number.
- 10. Write a C program to count number of digits in a number.
- 11. Write a C program to find first and last digit of a number.
- 12. Write a C program to find sum of first and last digit of a number.
- 13. Write a C program to swap first and last digits of a number.
- 14. Write a C program to calculate sum of digits of a number.
- 15. Write a C program to calculate product of digits of a number.
- 16. Write a C program to enter a number and print its reverse.
- 17. Write a C program to check whether a number is palindrome or not.
- 18. Write a C program to find frequency of each digit in a given integer.
- 19. Write a C program to enter a number and print it in words.
- 20. Write a C program to print all ASCII character with their values.
- 21. Write a C program to find power of a number using for loop.
- 22. Write a C program to find all factors of a number.
- 23. Write a C program to calculate factorial of a number.
- 24. Write a C program to find HCF (GCD) of two numbers.
- 25. Write a C program to find LCM of two numbers.
- 26. Write a C program to check whether a number is Prime number or not.
- 27. Write a C program to print all Prime numbers between 1 to n.
- 28. Write a C program to find sum of all prime numbers between 1 to n.
- 29. Write a C program to find all prime factors of a number.

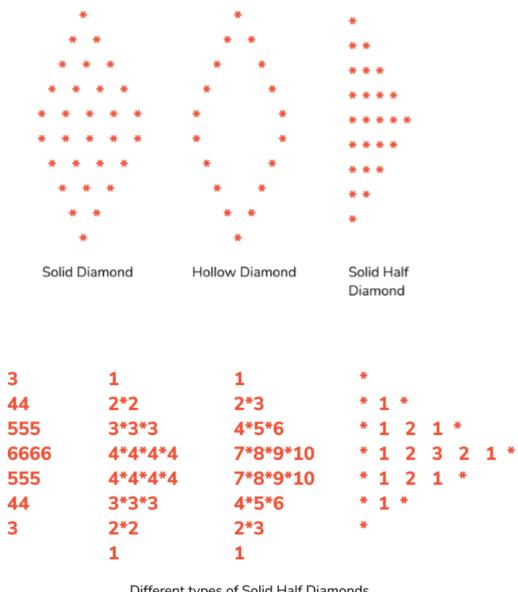
- 30. Write a C program to check whether a number is Armstrong number or not.
- 31. Write a C program to print all Armstrong numbers between 1 to n.
- 32. Write a C program to check whether a number is Perfect number or not.
- 33. Write a C program to print all Perfect numbers between 1 to n.
- 34. Write a C program to check whether a number is Strong number or not.
- 35. Write a C program to print all Strong numbers between 1 to n.
- 36. Write a C program to print Fibonacci series up to n terms.

#### **Patterns Assignment**





Different types of Palindrome Pyramid Patterns



Different types of Solid Half Diamonds

```
1
11
121
1331
14641
15101051
1615201561
```

Floyd's Triangle Pattern Program in C, C++, Java, Python

#### Pascal's Triangle Pattern Program in C, C++, Java, Python

### **Hollow Diamond Inscribed in a Rectangle**

### **Hollow Diamond Inscribed in a Rectangle**

### **Butterfly Pattern Printing**

# Diagonal & Sides of a Rectangle

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## Diagonal & Sides of a Rhombus/Diamond

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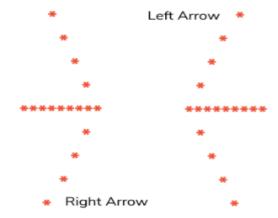
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## Left and Right Arrows



### Rhombus Pattern Program in C, C++, Java



Traingle with numbers

```
C program to print following pyramid
```

```
123454321
1234321
12321
121
```

```
C program to print character pyramid as given below:

A

B C

D E F

G H I J

K L M N O
```

```
/*
C program to print following character pyramid:
ABCDEDCBA
ABCD DCBA
ABC CBA
AB BA
A A
*/
```

```
/*
C program to print following pyramid:
A
BAB
CBABC
DCBABCD
EDCBABCDE
*/
```

```
/*
C program to print following pyramid
A
ABA
ABCBA
ABCDCBA
ABCDEDCBA
*/
```