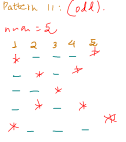
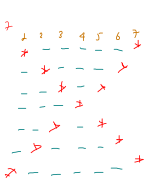
Pattern 11: (odd).

num = 5



num = 7



Pattern 12:

num = 4

1

1 2

3 5 8

13 21 34 55

Fibonacci

Identity:

sum → 0

subtract → 0

multiply → 1

division → 1

smallest → int.MAX_VALUE

5 + 0 = 5

5 - 0 = 5

5 * 1 = 5

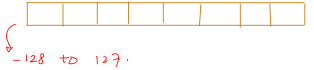
5 / 1 = 5

5, int.max → 5

Loss of precision:

int	long	double	float
4 byte	8 byte	8 byte	4 byte

1 byte → 8 bit.



-128 to 127.

(Int.MAX_VALUE)

Loss of precision

short → 2 byte

char → 2 byte

int → 4 byte

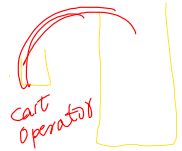
float → 4 byte

long → 8 byte

double → 8 byte

boolean → defined

Typecasting (automatic typecast).



Cumulative multiplication:

num = 5

1

2

3

2

4

o/p: 24

Pattern 9:

1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

Pattern 10:

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

Fibo:

0 1 1 2 3 5 8 13 21 34

10

Fibo

0 1 1 2 4 7 8

i/p.

Palindrome:

i/p: 21 o/p: YES.

i/p: 22 o/p: NO.