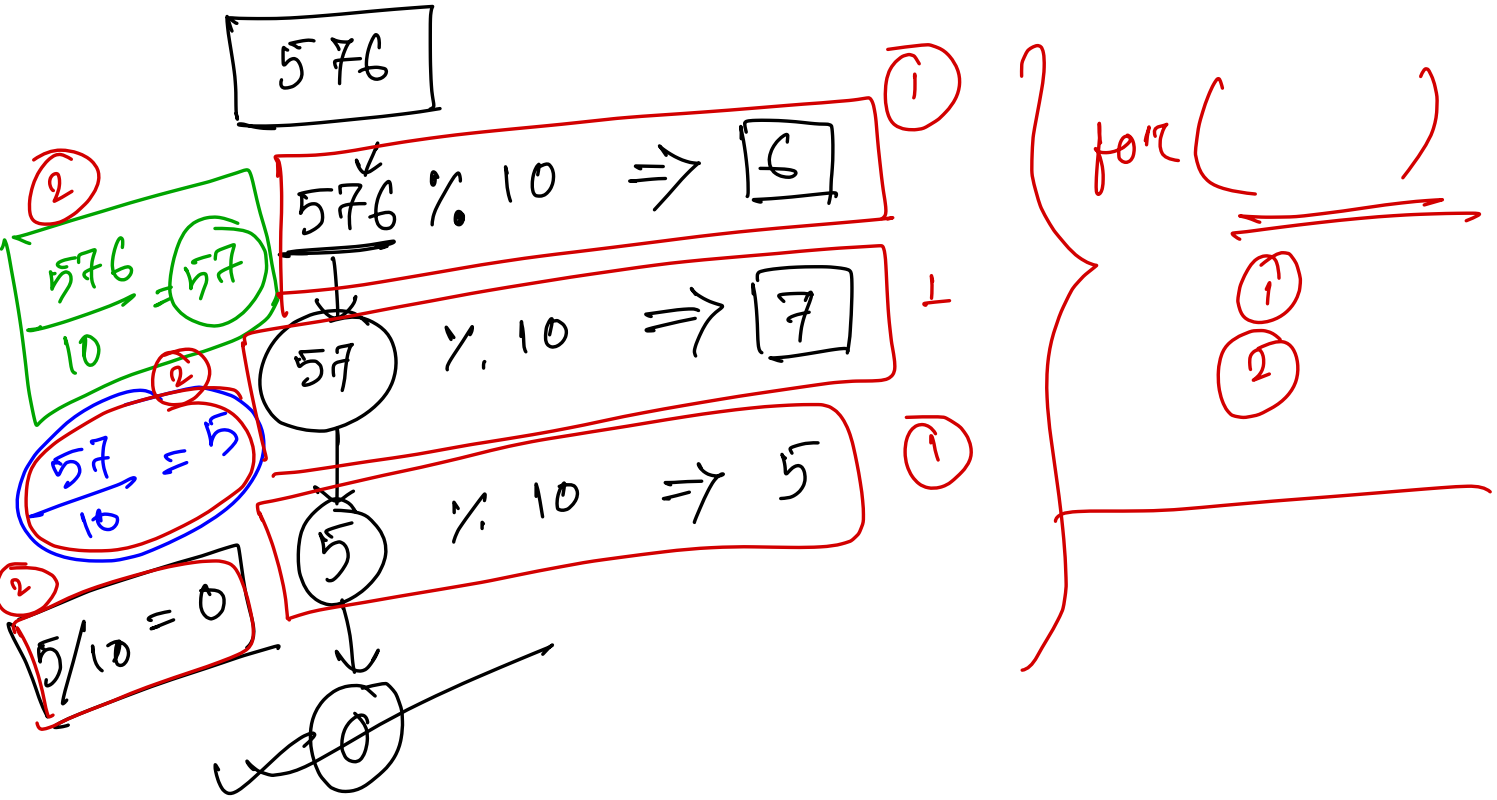



```
int main(){
    int num;
    printf("Enter any number :- ");
    scanf("%d", &num);
    int sum = 0;
    for( ; num>0; ){
        sum += (num % 10);
        num /= 10;
    }
    printf("%d is the sum of all digits.", sum);
    return 0;
}
```

num: 0

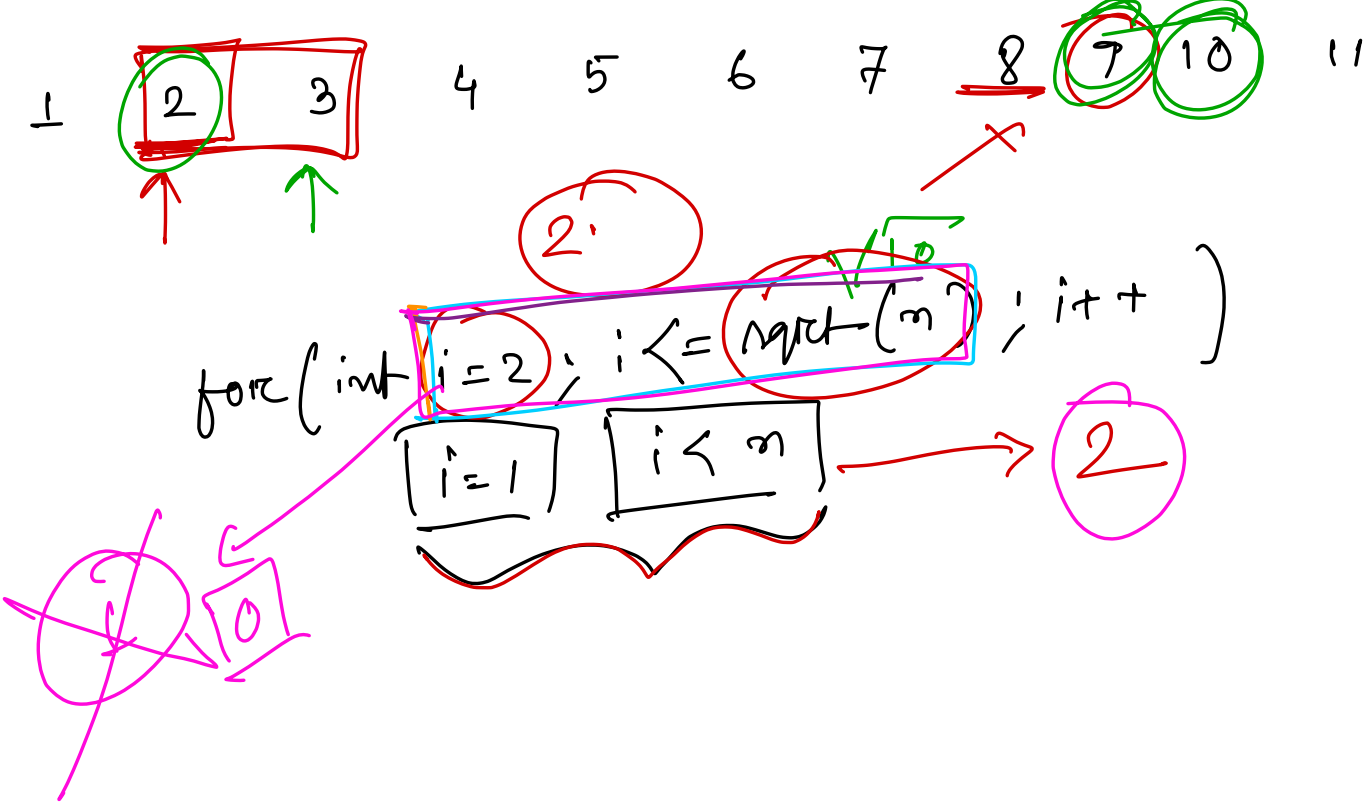
sum: 0 6 ~~13~~ 18

576 → initialization

num>0 → limit/condn

num /= 10 → updatation

18


1
2
3
4
5
6
7
8
9
10
11
2
for(int i=2; i<=sqrt(n); i++)
i=1
i<n
2
1
0

```
for (int i=0; i<5; i++)
    printf(" * ");
```

```
if ( ——— ) {
    if ( ——— ) {
        ———
    }
}
```

Nested If

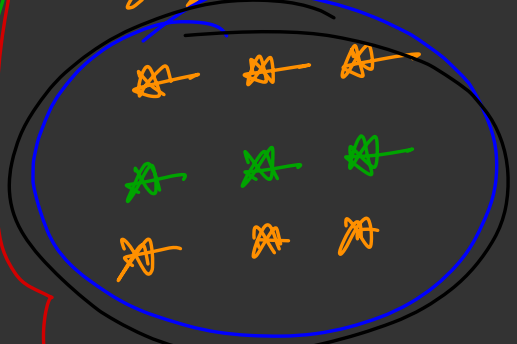
```
for (int i=0; i<5; i++) {
    for (int j=0; j<5; j++) {
        ———
    }
}
```

Nested for

```
for (int i=0; i<3; i++) {
    for (int j=0; j<3; j++) {
        printf(" * ");
    }
}
```

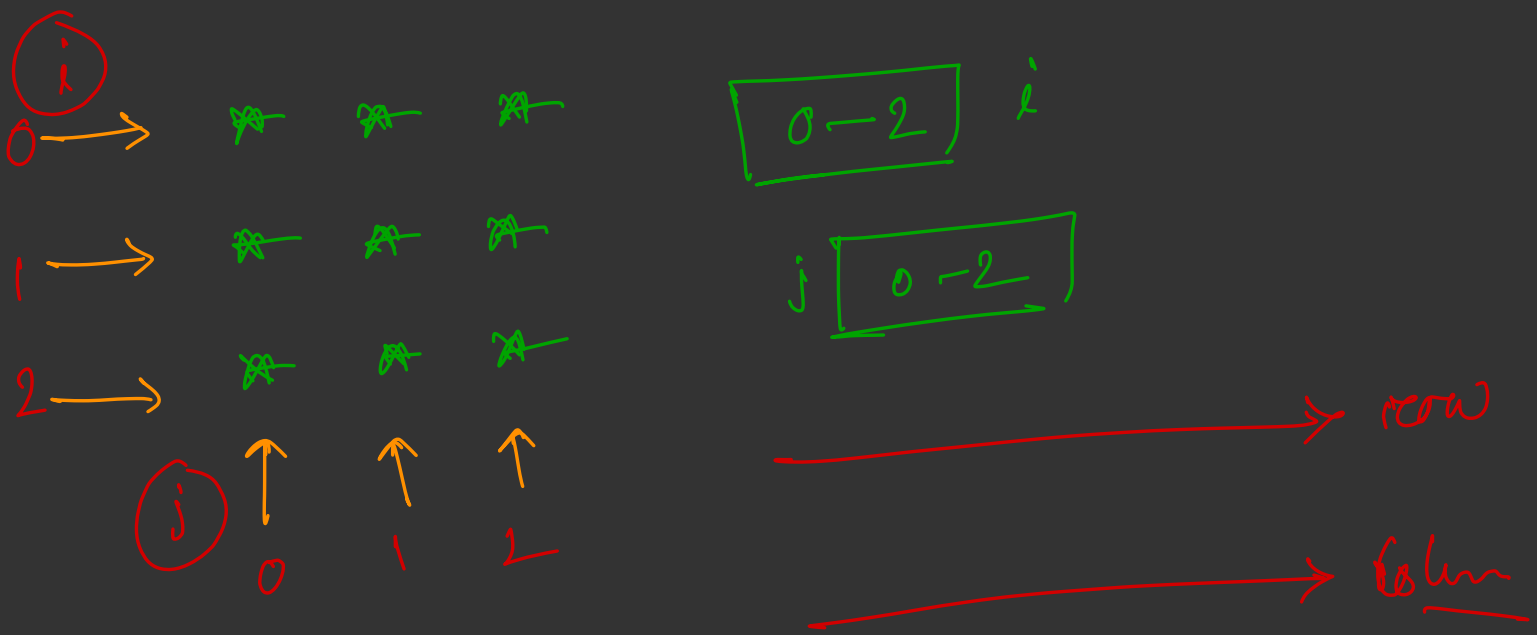
i = 0 1 2 3

j = 0 1 2 3



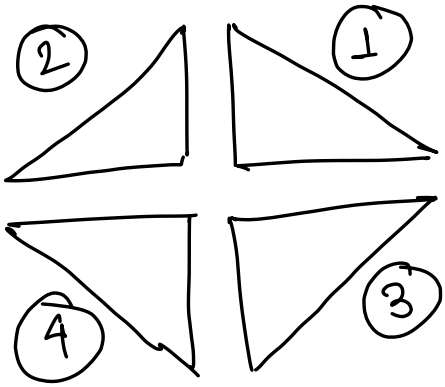
printf("\n");

}

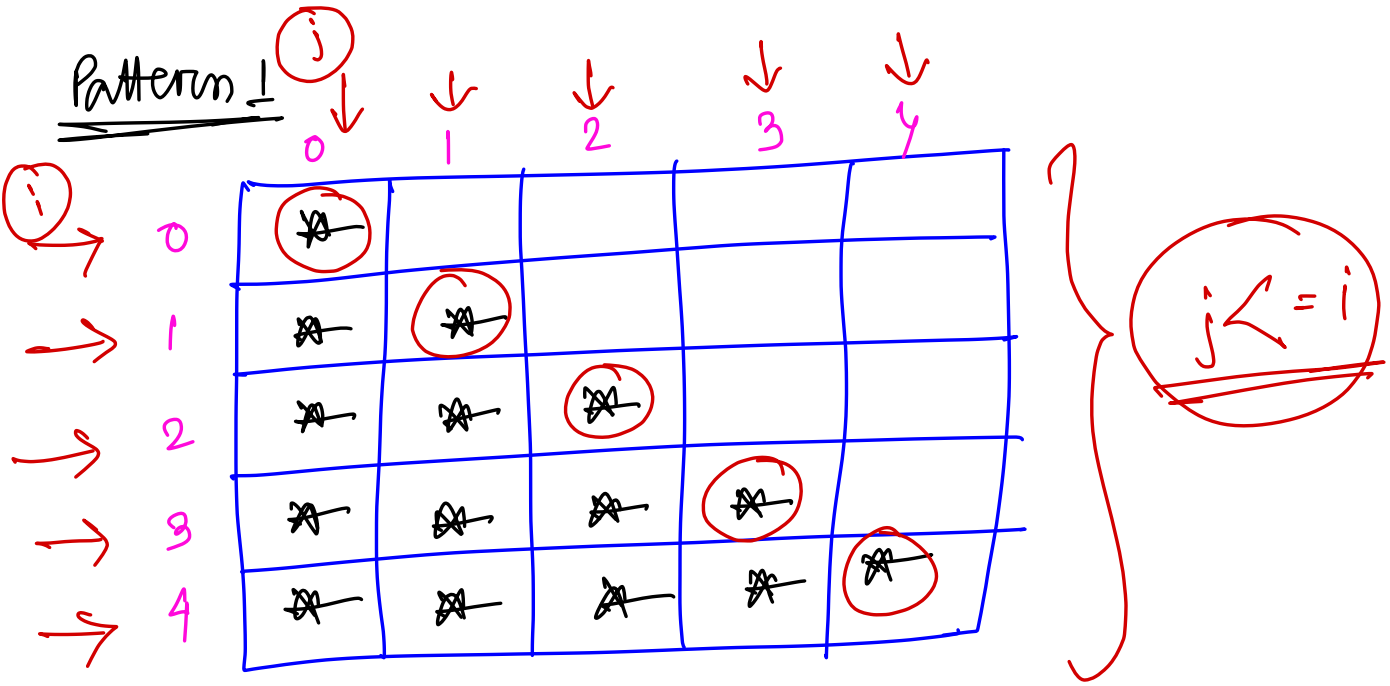



```
for(int i=0; i<5; i++){
    for(int j=0; j<2; j++){
        printf("*");
    }
    printf("\n");
}
```

Patterns



Pattern 1




```
for(int i=0; i<5; i++){
    for(int j=0; j<=i; j++){
        printf("*");
    }
    printf("\n");
}
```