```
for(int i=0 ; i<=10 ; i+=2)
{
    cout<<"M";
}
```

i+=2 ⇓ i = i+2

11 times

M

i=0 ; i=2 ; i=4 ; . . . i=10

6 times

MMM. . .
6 times

switch Case

```
int marks = 30 ;
switch(marks)
```

```
if(  )
{  }
else if(  )
{
}
```

```
case 10 :
    cout<<"Failed"; break;
case 20 :
    cout<<"Average";
default :
    cout<<"Pass";
```

i=0 M
i=1

```
break ;
for(int i=0 ; i<=10 ; i++)
{
    if(i==1) break;
    cout<<"M";
}
```

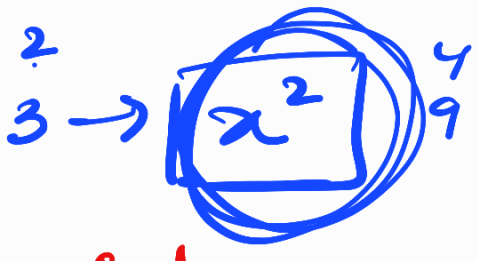
continue;

```
for(int i=0; i<10; i++)
{   if(i==1) continue;
    cout<<"M";
}
```

M 9 times

Functions

```
int main() {
    int n1, n2; n3, n4;
    cin>>n1>>n2;
    cout<<sum(n1,n2);
    cin>>n3>>n4
    cout<<sum(n3,n4);
}
```




```
int ans =
    sum(n1,n2)
cout<<ans;
```

void int string

```
void sumTwoNum(int a, int b) {
    cout<< a+b <<endl;
}
```

```
int sum(int a, int b){
    return (a+b);
}
```

```
void sayHi(_){
    cout << "Hello Friends";
}
```

y = 1

definition

```
int main(){
    sayHi();
}
```

← calling of the fn.

---

global, local

Recursion / Repetition

```
int i=0
void recurse(){
    cout << "Hello" << endl;
    i++;
    if(i==3) return i;
    recurse();
}
```

R1 → R2 → R3

i=0	Hello
i=1	Hello
i=2	Hello
i=3	

```
int main( ) {
    int a = 0;
    recurse( );
}
```

completed

```
#include <b . . . >
using . . . std
int i = 0;
void recurse( ) { . . . }
int main( ) {
    ———
    ———
    ———
}
main( ) {
    int num;
    ———————
    cin>> num;
    cout << sumofdigits(num);
    return 0;
}
int sumofdigits ( int num) {
    int sum = 0;
    while (num != 0) {
        int digit = num % 10;
        sum += digit;
        num = num / 10;
    }
    return sum;
}
```

global

998 % 10

9+9+8

998 / 10 = 99.8

118 119 119 = 99

sum = 17+9 = 26

num = 9/10 = 0

0.9