```
int x=5;
int y=90;
int ans=x+y;

cout<<ans;

// duplicacy ya code repeat ho jata hai
//addition
int m=89;
int n=789;
int op=m+n

Or
int m=89;
int n=789;
int op=m+n
}
```

For solving the problem of code duplicacy(duplicate line of code) we use functions.

0
advantages->
reusability.
modability.
easy understand.

Parts of function in c++/java
1.function declaration
2. function definition
3. function calling

```
for(int j=0;j<6;j++){
    for(int k=0;k<6;k++){

    }
  }
}
```

Syntax of function in c++/java

```
//Function definition along with function declaration
returntype functionname(parameter list using datatype such as int, float, or anything
{jis type kee value parameter me store karna hai){

//write your logic or code jo kaam aapko function se karana hai

}

//function calling

functionName(argument(ya value pass karna padega agar function ke andar aapne
parameter list dee hui hai to yha par variable ka name ya direct value pass karte hai)
```

C++/ java me function banana ke leaye function keyword ka use nhi hota hai

Parameter List->aapko variable banana hai data type ka use karke jaise ex-> int x

jab bhi aap koi function create karte hai us time parenthesis ke andar jo bhi likhte hai unko parameter kahte hai
agar aapka function multiple parameter hai to aapke parameter comma separated honge or har ek parameter me data type ka use karna padega

(int x, y) ✓

(int x, float y)

(x,y) ✗

(x,int y) ✗

(inke andara parameter hamesha data type ke sath dena badega)

Jab bhi last parameter banate hai uske bad semicolon ya comma ka use nhi karte hai

(int z, int y, int d;) ✗

(int z, int y, int d,) ✗

Return types means-> int, float,char, double, long, string, short
ye data type hote hai

return type-> Aapka function kis type ka value mujhe vapas karega
(return type means ki aapka function agar **20** return kar rha hai to ye ek numeric value hai or esme decimal point nhi hai to es type kee value ko store karne ke leaye **int data type** ka use keaya jata hai

agar character return karega to hamare pass **char**
agar string hui to -> string ka use karunga
agar float hui to-> float

Jab kisi bhi function ka ya variable ka mujhe return type nhi pta hai us case me void return type ka use karta hu eksa matlab hota aap return keyword function ke andar use kar nhi sakte hai

function banana ke time me agar aap return type ka use karte hai to aapko function ke return likhna jaruri hai.(return value karna jaruri hai jis type ka aapne return likha hai usi type kee value return karani padegi)

Jab bhi function ke andar return keyword hoga tab tab function call karne ke time par varible me store karna jaruri hai (agar aap us function ke o/p ko function ke bahar use kar rhe to

Function with no parameter and no return type **it means void type ka function**

```
void printValue ( ) {

    cout<<"I am printvalue function";

}
```

yha return type ka use nhi keaya to directly function ko call kar lo

```
printValue();// function calling
```

Return type with no parameter (jab bhi return type lagaoge tab bhi function andar return keayword ka use karna padega .

```
int printValue(){
    int x=10;
    int y=56;
    return x+y;
}
```

yha return type ka use keaya to directly function ko call karke use variable me store karna padega.

```
int x=printValue();// function calling
```

AGAR RETURN TYPE KA FUNCTION NHI BANAYA TO FUNCTION KE ANDAR RETURN KEYWORD YA RETURN KOI BHI VALUE NHI KRA SAKTE

function with return type and parameter list

```
int sumOfTwoNo(int x,int y){

    return x+y;

}
```

yha return type ka use keaya to directly function ko call kar lo and varible me store karna padega

```
sumOfTwoNo(2,4);// function calling
```

Return Type with no of parameters

```
int sumOfTwoNo(){

    int x=10,y=20;
     return x+y;

}
```

//jab function me return tyoe hoga tab tab function calling ke time me use store karna padega

```
int op=sumOfTwoNo();
```