

# FUNCTION

```
1. #include <iostream>
using namespace std;
```

```
void PrintHello(){
    cout<<"Hello"<<endl;
}
```

```
int main() {

    PrintHello();
    int a=10;
    int b=5;

    cout<<"Hello"<<endl;

    return 0;
}
```

```
2. #include <iostream>
using namespace std;
```

```
int PrintHello(){
    cout<<"Hello"<<endl;
    return 3;
}
```

```
}
```

```
int main() {  
    // Write C++ code here  
    cout<<PrintHello()<<endl;  
  
    return 0;  
}
```

3. #include <iostream>  
using namespace std;

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

```
int main() {  
    // Write C++ code here  
    cout<<sum(10,5)<<endl;  
  
    return 0;  
}
```

4. #include <iostream>  
using namespace std;

```

int minoftwo(int a,int b){ //parameters
    if(a<b){
        return a;
    }else{
        return b;
    }
}

int main() {
    cout<<minoftwo(10,5)<<endl; //arguments

    return 0;
}

```

5. #include <iostream>  
using namespace std;

```

int sum(int n){
    int sum = 0;
    for(int i=1;i<=n;i++){
        sum+=i;
    }
    return sum;
}

```

```

int main() {
    cout<<sum(5)<<endl;
}

```

```
    return 0;  
}
```

```
6. #include <iostream>  
using namespace std;
```

```
int fact(int n){  
    int fact = 1;  
    for(int i=1;i<=n;i++){  
        fact*=i;  
    }  
    return fact;  
}
```

```
int main() {  
    // Write C++ code here  
    cout<<fact(5)<<endl;  
  
    return 0;  
}
```

Pass by value : copy of arguments passed to a function

```
7. #include <iostream>
```

```
using namespace std;
```

```
int sumofdigit(int num){  
    int sumofdigit = 0;  
  
    while(num>0){  
        int lastdigit = num % 10;  
        num = num/10;  
        sumofdigit += lastdigit;  
    }  
    return sumofdigit;  
}
```

```
int main() {  
    cout<<"sumofdigit= "<<sumofdigit(523)<<endl;  
  
    return 0;  
}
```

```
8. #include <iostream>  
using namespace std;
```

```
int factorial(int n){  
    int fact = 1;  
  
    for(int i=1;i<=n;i++){
```

```

        fact *= i;
    }

    return fact;
}

int nCr(int n, int r){
    int fact_n =factorial (n);
    int fact_r =factorial (r);
    int fact_nmr =factorial (n-r);

    return fact_n /(fact_r * fact_nmr);
}


int main() {
    int n=5;
    int r=3;
    cout<<"fact = "<<nCr(n,r) <<endl;

    return 0;
}

```