

Call by Reference

- Actual parameters are passed as reference
- Formal parameters can directly access actual parameters
- Function call is converted into inline function, if not possible it will become call by address
- Reference don't take extra memory
- Syntax is same as Call by Value except, formal parameters are reference

```
Void swap(int &a, int &b)
```

```
{  
    int temp;  
    temp=a;  
    a=b;  
    b=temp;  
}
```

```
Int main()
```

```
{  
    int x=10, y=20;  
  
    swap(x,y);  
    cout<<x<<y;  
}
```

Call by Address

- Address of actual parameters are passed.
- Formal parameters must be pointers
- Formal parameters can indirectly access actual parameters.
- Changes done using formal parameters will reflect in actual parameters

```
Void swap(int *x, int *y)
```

```
{  
    int temp;  
    temp=*x;  
    *x=*y;  
    *y=temp;  
}
```

```
Int main()
```

```
{  
    int a=10, b=20;  
  
    swap(&a,&b);  
    cout<<a<<b;  
}
```