

Day 46

21/04/2025

```
int x = 10
int y = 20
add(x, y)
```

send value

$x = 10 ; y = 20$

$\leftarrow 30$

Normal  $\rightarrow$

```
public int add(int a, int b)
{
    return a + b
}
```

of x and y.

```
int x = 10
int y = 20
int sum =
add(x, y)
add(ref x,
    ref y)
```

send address

$\leftarrow a = 20 \quad b = 40$   
 $sum = 60$

Ref keyword  $\rightarrow$

```
public int add(ref int a,
    ref int b)
{
    a = a + 10;
    b = b + 20;
    return a + b;
}
```

ref keyword is used to pass arguments by reference to methods. This allows the methods to modify the value of the parameters and have that change reflected outside the method.

ref → must initialized before passing it

eg:- int y = 5;

int x = 5;

add (ref y, ref x);

out → ~~must~~ not need to initialized before passing; but we to initialized the value in method.

eg:-

int y;

int x;

add (out x, out y)

// method

x = 5;

y = 5;

return (x + y);

in → same as ref keyword but can not reassign the value outside of the method.  
\* can't not assign to in parameter

String a = "10"; int value = 100;

int.TryParse (a, out value)

↓

It will take default value if the string value is not int.

int.TryParse (a, out int value);

←  
initialized and devalued  
inside the TryParse.