Swapping 2 nos (Using 3 variable)

```
#include <stdio.h>

#include <conio.h>

void main()
{
    int a,b,c;

    clrscr();

    printf("Enter 2 int:");
    scanf("%d %d", &a, &b);
```

~~10~~ 20	~~20~~ 10	10 ?
a	b	c

```
    printf("Before swapping:");

    printf("a= %d, b= %d", a, b);
```

a = 10, b = 20

```
    c = a;
    a = b;
    b = c;
    printf("\n After swapping");
    printf(" a= %d, b= %d", a, b);
    getch();
}
```

a = 20, b = 10

Swapping 2 nos (Using 2 var)

```
#include <stdio.h>

#include <conio.h>

void main()
{
    int a,b;

    clrscr();

    printf("Enter 2 int:");
    scanf("%d %d", &a, &b);
```

20	10
a	b

```
    printf("Before swapping:");

    printf("a= %d b= %d", a, b);
```

a = a+b;
b = a-b;
a = a-b;

Swapping code

```
    printf("\n After swapping:");

    printf("\n a= %d, b= %d", a, b);
    getch();
}
```

Type Casting (Local Conversion)

```c
#include <stdio.h>
#include <conio.h>

void main()
{
    int a, b;
    float c;
    clrscr();

    printf(" Enter 2 int:");
    scanf("%d %d", &a, &b);
              10    4

    c = (float)a / b;

    printf(" Div is %f", c);

    getch();
}
```

Syntax of Type Casting

① (data type) var

② (data type) const

③ (data type) (expr)

Type Casting of Const

$$avg = Sum / 3.0;$$

OR

$$avg = Sum / (float) \, 3;$$

Type Casting of expr.

$$avg = (a+b+c) / 3.0;$$

OR

$$avg = (float)(a+b+c) / 3;$$

Are they Same?

int a = 10, b = 4;

float c = (float) a / b; ——> This will give 2.5

V/s

int a = 10, b = 4;
float c = (float)(a/b); →This will give 2.0

No, they are not same!

Another Way To Write Previous Code

```c
#include <stdio.h>
#include <conio.h>

void main()
{
    int a, b;




    clrscr();
```

```c
    printf("Enter 2 int:");

    scanf("%d %d", &a, &b);
         // 10   4




    printf("Div is %f", (float)a/b);

    getch();
}
```

Type Casting Of float To int

```c
#include <stdio.h>

#include <conio.h>

void main()
{
    float a, b;


    int c;

    clrscr();
```

```c
    printf("Enter 2 float:");

    scanf("%f %f", &a, &b);
         // 5.9   2.6
```
```c
    c = (int)a / (int)b;
         // 5/2
```
```c
    printf("Rem is %d", c);

    getch();
}
```