

## Section :- 1

Ques:- 2

Ans:- We can swap two number without using third variable. there are two common ways to swap two number without using third variable

1. By + and

2. By \* and /

Program 1 using + and -

Let see simple C example to swap two numbers without using third variable.

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

```
int main ()
```

```
{
```

```
int a = 10, b = 20
```

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

```
a = a + b; // a = 30 (10 + 20)
```

```
b = a - b; // b = 10 (30 - 20)
```

```
a = a - b; // a = 20 (30 - 10)
```

```
printf ("\n After swap a = %d b = %d", a, b);
```

```
return 0;
```

Before	swap	a=10	b=20
After	swap	a=20	b=10

Program 2 using \* and /

Let's see another example swap numbers using \* and /.

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

```
# include <stdlib.h>
```

```
int main()
```

```
{
```

```
int a=10, b=20
```

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

```
a = b * b; // a = 20 (10 * 20)
```

```
b = a / b; // b = 10 (200 / 20)
```

```
a = a / b; // a = 20 (200 / 10)
```

```
system("cls")
```

```
printf("\n After swap a=%d b=%d", a, b);
```

```
return 0;
```

```
}
```