

Q5.)

Write a programme that swaps values of two variables using a third variable.

step - 1

```
a = 20  
b = 10  
c = a  
a = b  
b = c
```

step - 2

```
int a = 20;  
int b = 10;  
int c = a ;  
a = b;  
b = c;
```

```

1 //step 3
2
3 #include <stdio.h>
4
5 int main()
6 {
7     int a = 20;
8     int b = 10;
9
10    printf("Before swapping: a=%d, b=%d\n", a, b);
11
12    int c = a;
13    a = b;
14    b = c;
15
16    printf("After swapping: a=%d, b=%d\n", a, b);
17
18    return 0;
19 }
20

```

```

1 //step 4
2
3 #include <stdio.h>
4
5 int main()
6 {
7     int first_Number = 20;
8     int second_Number = 10;
9
10    printf("Before swapping: a=%d, b=%d\n", first_Number, second_Number);
11
12    int duplicate_variable = first_Number;
13    first_Number = second_Number;
14    second_Number = duplicate_variable;
15
16    printf("After swapping: a=%d, b=%d\n", first_Number, second_Number);
17
18    return 0;
19 }
20

```

```

1 //step 5
2
3 #include <stdio.h>
4
5 int main()
6 {
7     int first_Number;
8
9     printf("Enter first number: ");
10    scanf("%d", &first_Number);
11
12    int second_Number;
13    printf("Enter second number: ");
14    scanf("%d", &second_Number);
15
16    printf("Before swapping: first number =%d, second number=%d\n", first_Number, second_Number);
17
18    int duplicate_variable = first_Number;
19    first_Number = second_Number;
20    second_Number = duplicate_variable;
21
22    printf("After swapping: first number =%d, second number=%d\n", first_Number, second_Number);
23
24    return 0;
25 }
26

```

```

1 //step 6
2
3 #include <stdio.h>
4
5 int main()
6 {
7     int first_Number, second_Number, duplicate_variable;
8
9     printf("Enter first number: ");
10    scanf("%d", &first_Number);
11
12    printf("Enter second number: ");
13    scanf("%d", &second_Number);
14
15    printf("Before swapping: first number =%d, second number=%d\n", first_Number, second_Number);
16
17    duplicate_variable = first_Number;
18
19    first_Number = second_Number;
20
21    second_Number = duplicate_variable;
22
23    printf("After swapping: first number =%d, second number=%d\n", first_Number, second_Number);
24
25    return 0;
26 }
27

```