

Q.1 Write a Program to Swap two variables using the third variable.

Ans;

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

```
int main() {  
    int a,b,c;  
    printf("\nbefore swapping:a=");  
    scanf("%d",&a);  
    printf("\nbefore swapping:b");  
    scanf("%d",&b);  
    c=a;  
    a=b;  
    b=c;  
    printf("\nafter swapping\ta=%d,b=%d",a,b);
```

o/p;

before swapping:a=20

before swapping:b30

after swapping a=30,b=20

Q.2 Write a Program to Swap two variables without using a third variable.

Ans:

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

```
int main() {  
    int a,b;  
    printf("\nbefore swapping:a=");  
    scanf("%d",&a);  
    printf("\nbefore swapping:b=");  
    scanf("%d",&b);  
    a = a + b;  
    b = a - b;  
    a = a - b;  
    printf("after swapping:a=%d,b=%d ",a,b);
```

```
    return 0;  
}
```

o/p;

before swapping:a=20

before swapping:b=10
after swapping:a=10,b=20

Q.3 Write a Program to find the formula's answer $(x+y)^2$.
Ans:

// Online C compiler to run C program online
#include <stdio.h>

```
int main() {  
    int x,y;  
    printf("\n Enter X = ");  
    scanf("%d",&x);  
    printf("\nEnter Y = ");  
    scanf("%d",&y);  
    int result = (x + y) * (x + y);  
    printf(" x = %d and y = %d answer: %d\n", x, y, result);  
  
    return 0;  
}
```

O/P:

Enter X = 30

Enter Y = 40

x = 30 and y = 40 answer: 4900

Q.4 Write a Program to find the formula's answer $(x-y)^2$.
ans:

// Online C compiler to run C program online
#include <stdio.h>

```
int main() {  
    int x,y;  
    printf("\n Enter X = ");  
    scanf("%d",&x);  
    printf("\nEnter Y = ");  
    scanf("%d",&y);
```

```
int result = (x - y) * (x - y);
printf(" x = %d and y = %d answer: %d\n", x, y, result);

return 0;
}
```

O/P:

Enter X = 20

Enter Y = 10

x = 20 and y = 10 answer: 100

Q.5 Write a Program to find the formula's answer $(x+y)^3$.
ans:

// Online C compiler to run C program online
#include <stdio.h>

```
int main() {
    int x,y;
    printf("\n Enter X = ");
    scanf("%d",&x);
    printf("\nEnter Y = ");
    scanf("%d",&y);
    int result = (x + y) * (x + y) * (x + y);
    printf(" x = %d and y = %d answer: %d\n", x, y, result);

    return 0;
}
```

O/P:

Enter X = 10

Enter Y = 20

x = 10 and y = 20 answer: 27000

