

```

1  #include<stdio.h>
2  int main()
3  {
4      int num1,num2,output;
5      char operator;
6      printf("Enter a binary expression:");
7      scanf("%d %c %d",&num1,&operator,&num2);
8      switch(operator)
9      {
10         case '+':
11             output=num1+num2;
12             break;
13         case '-':
14             output=num1-num2;
15             break;
16         case '*':
17             output=num1*num2;
18             break;
19         case '/':
20             output=num1/num2;
21             break;
22         case '%':
23             output=num1%num2;
24             break;
25         default :
26             printf("invalid operation");
27             break;
28     }
29     printf("%d",output);
30     return 0;
31 }

```

```

C:\Users\sam\Desktop\arithmetic.exe
Enter a binary expression:2+3
5
-----
Process exited after 7.252 seconds with return value 0
Press any key to continue . . .

```

```

test.c
1  #include<stdio.h>
2  int main()
3
4  {
5      // a = 5(00000101)
6      unsigned short a = 5, b = -8; // 8 =(00001000) and -8 = (00001000 + 11110110 = 11110111)
7
8      // c = 6(00000110) //d = 9(00001001)
9      signed short c = 6, d = -8;
10
11     // The result is 00001010
12     printf("a<<1 = %d\n", a<<1);
13     // The result is 00000010
14     printf("a>>1 = %d\n", a>>1);
15     // The result is 00001100
16     printf("c<<1 = %d\n", c<<1);
17     // The result is 00000011
18     printf("c>>1 = %d\n", c>>1);
19
20     printf("\n\n");
21
22     /*signed short range = 0 to 65,535 */
23     printf("b<<1 = %d\n", b<<1); // -8>>1 = (11110111 >> 01111011)
24     printf("b>>1 = %d\n", b>>1); // -8<<1 = (11110111 << 11110110)
25
26     /*signed short range = -32,768 to 32,767*/
27     printf("d>>1 = %d\n", d>>1);
28
29     printf("d<<1 = %d\n", d<<1);
30     return 0;
31 }
32
33
34
35
36

```

```

C:\Users\sam\Desktop\NOTES\C\test.exe
a<<1 = 10
a>>1 = 2
c<<1 = 12
c>>1 = 3

b<<1 = 131056
b>>1 = 32764
d>>1 = -4
d<<1 = -16

-----
Process exited after 0.02465 seconds with return value 0
Press any key to continue . . .

```

test.c t.c

```
1
2  #include <stdio.h>
3  int main()
4  {
5
6      int i, j, a, n, number[30];
7      printf("Enter the value of N \n");
8      scanf("%d", &n);
9
10     printf("Enter the numbers \n");
11     for (i = 0; i < n; ++i)
12         scanf("%d", &number[i]);
13
14     for (i = 0; i < n; ++i)
15     {
16
17         for (j = i + 1; j < n; ++j)
18         {
19
20             if (number[i] > number[j])
21             {
22
23                 a = number[i];
24                 number[i] = number[j];
25                 number[j] = a;
26
27             }
28
29         }
30
31     }
32     printf("The second largest number is \n");
33     printf("%d\n", number[n-2]);
34     return 0;
35 }
```

C:\Users\sam\Desktop\t.exe

```
Enter the value of N
4
Enter the numbers
15
35
62
48
The second largest number is
48

-----
Process exited after 8.131 seconds with return value 0
Press any key to continue . . .
```

tc | t.cpp

```
#include<stdio.h>
int main()
{
    int x=10;
    float y=5;
    printf("%f \n",x/y); // Implicit Conversion

    printf("%d",x/y);

    return 0;
}
```

C:\Users\sam\Desktop\t.exe

2.000000

0

Process exited after 0.01953 seconds with return value 0

Press any key to continue . . .