

1. Write a C program that will take a character as input and convert it into uppercase if it is given as lowercase and vice-versa.

```
1  #include <stdio.h>
2  #include <ctype.h>
3  int main()
4  {
5      char ch;
6      ch = getchar();
7      if (isupper(ch))
8      {
9          putchar(tolower(ch));
10     }
11     else{
12         putchar(toupper(ch));
13     }
14
15     return 0;
16 }
17
```

Output:

```
D
d
Process returned 0 (0x0)    execution time : 1.796 s
Press any key to continue.
```

2. Write a C program to perform various formatted input/output operations on floating point numbers.

```
1  #include <stdio.h>
2  int main()
3  {
4      //formatted input
5      float f,k,x,y;
6      scanf("%f:%f",&x,&y);
7      printf("x=%f\n y=%f\n",x,y);
8      scanf("%3f%5f",&f,&k);
9      printf("f=%f\n k=%f\n",f,k);
10
11     //formatted output
12     float a=9536.8934;
13     printf("%8.4f\n",a);
14     printf("%8.2f\n",a);
15     printf("%-8.2f\n",a);
16     printf("%f\n",a);
17     printf("%10.2e\n",a);
18     printf("%11.4e\n",-a);
19     printf("%-10.2e\n",a);
20     printf("%e\n",a);
21 }
22
```

Output:

```
45.26:56.924
x=45.259998
y=56.924000
4512684.5632
f=451.000000
k=2684.000000
9536.8936
 9536.89
9536.89
9536.893555
 9.54e+003
-9.5369e+003
9.54e+003
9.536894e+003
```

Process returned 0 (0x0) execution time : 12.626 s  
Press any key to continue.

3. Write a C program for converting days into years, months and days.

```
1  #include <stdio.h>
2  int main()
3  {
4      int d1,d,y,m,i;
5      printf("Enter Day = \n");
6      scanf("%d",&i);
7      y=i/365;
8      d1=i%365;
9      m=d1/30;
10     d=d1%30;
11     printf("%d Years,%d Months,%d Days",y,m,d);
12 }
13
```

Output:

```
Enter Day =
1032
2 Years,10 Months,2 Days
Process returned 0 (0x0)    execution time : 6.733 s
Press any key to continue.
■
```

4. Write a C program for assigning  $(1 > 4 \parallel 3 \neq 5)$  to a variable and print its value.

```
1  | #include <stdio.h>
2  | int main()
3  | {
4  |     int a;
5  |     a = ((1 > 4) || (3 != 5));
6  |     printf("Value = %d", a);
7  |
8  |     return 0;
9  | }
10 |
```

Output:

```
Value = 1
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

5. Write a C program to check whether a number is even or odd using bitwise operator.

```
1  #include <stdio.h>
2  int main()
3  {
4      int num;
5      printf("Enter Number : ");
6      scanf("%d", &num);
7
8      if((num & 1)==0)
9      {
10         printf("%d is Even", num);
11     }
12     else{
13         printf("%d is Odd", num);
14     }
15
16     return 0;
17 }
18
```

Output:

```
Enter Number : 5
5 is Odd
Process returned 0 (0x0)   execution time : 0.750 s
Press any key to continue.
```

