

```
Ex_1.c Console
1 /*
2  * Ex_1.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8
9 #include <stdio.h>
10
11 int main(){
12     int input;
13     printf("Enter an integer you want to check: ");
14     fflush(stdout);
15     fflush(stdin);
16     scanf("%d", &input);
17     if(input % 2 == 0)
18         printf("%d is even", input);
19     else
20         printf("%d is odd", input);
21     return 0;
22 }
23
```

<terminated> (exit value: 0) Ex_1.exe [C/C++ Application]
Enter an integer you want to check: 5
5 is odd

```
Ex_1.c Console
1 /*
2  * Ex_1.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8
9 #include <stdio.h>
10
11 int main(){
12     int input;
13     printf("Enter an integer you want to check: ");
14     fflush(stdout);
15     fflush(stdin);
16     scanf("%d", &input);
17     if(input % 2 == 0)
18         printf("%d is even", input);
19     else
20         printf("%d is odd", input);
21     return 0;
22 }
23
```

<terminated> (exit value: 0) Ex_1.exe [C/C++ Application]
Enter an integer you want to check: 6
6 is even

```
Ex_2.c
1 /*
2  * Ex_2.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     char input;
12     printf("Enter an alphabet: ");
13     fflush(stdout);
14     fflush(stdin);
15     scanf("%c", &input);
16     switch(input){
17         case 'a':
18         case 'e':
19         case 'i':
20         case 'o':
21         case 'u':{
22             printf("%c is a vowel", input);
23             break;
24         }
25         default:{
26             printf("%c is a consonant", input);
27             break;
28         }
29     }
30     return 0;
31 }
32
```

Console

<terminated> (exit value: 0) Ex_2.exe [C/C++ Application]

Enter an alphabet: k

k is a consonant

```
Ex_2.c
1 /*
2  * Ex_2.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     char input;
12     printf("Enter an alphabet: ");
13     fflush(stdout);
14     scanf("%c", &input);
15     switch(input){
16         case 'a':
17         case 'e':
18         case 'i':
19         case 'o':
20         case 'u':{
21             printf("%c is a vowel", input);
22             break;
23         }
24         default:{
25             printf("%c is a consonant", input);
26             break;
27         }
28     }
29     return 0;
30 }
31
32
```

Console

<terminated> (exit value: 0) Ex_2.exe [C/C++ Application]
Enter an alphabet: i
i is a vowel

```
Ex_3.c
1 /*
2  * Ex_3.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     float num, max;
12     printf("Enter three numbers: ");
13     fflush(stdout);
14     scanf("%f", &num);
15     max = num;
16     for(int i = 1; i < 3; i++){
17         scanf("%f", &num);
18         if(num > max)
19             max = num;
20     }
21     printf("Largest number = %f", max);
22     return 0;
23 }
24
```

Console

<terminated> (exit value: 0) Ex_3.exe [C/C++ Application]
Enter three numbers: 4 8 1
Largest number = 8.000000

```
Ex_4.c  Console
1  /*
2  *  Ex_4.c
3  *
4  *   Created on: Jul 31, 2021
5  *   Author: Sarah
6  */
7
8  #include <stdio.h>
9
10 int main(){
11     float num;
12     printf("Enter a number: ");
13     fflush(stdout);
14     scanf("%f", &num);
15     if(num > 0)
16         printf("%f is positive", num);
17     else if(num < 0)
18         printf("%f is negative", num);
19     else
20         printf("You entered zero.");
21
22     return 0;
23 }
24
```

<terminated> (exit value: 0) Ex_4.exe [C/C++ Application]
Enter a number: -5
-5.000000 is negative

```
Ex_4.c  Console
1  /*
2  *  Ex_4.c
3  *
4  *   Created on: Jul 31, 2021
5  *   Author: Sarah
6  */
7
8  #include <stdio.h>
9
10 int main(){
11     float num;
12     printf("Enter a number: ");
13     fflush(stdout);
14     scanf("%f", &num);
15     if(num > 0)
16         printf("%f is positive", num);
17     else if(num < 0)
18         printf("%f is negative", num);
19     else
20         printf("You entered zero.");
21
22     return 0;
23 }
24
```

<terminated> (exit value: 0) Ex_4.exe [C/C++ Application]
Enter a number: 6
6.000000 is positive

```
Ex_4.c
1 /*
2  * Ex_4.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     float num;
12     printf("Enter a number: ");
13     fflush(stdout);
14     scanf("%f", &num);
15     if(num > 0)
16         printf("%f is positive", num);
17     else if(num < 0)
18         printf("%f is negative", num);
19     else
20         printf("You entered zero.");
21
22     return 0;
23 }
24
```

Console

```
<terminated> (exit value: 0) Ex_4.exe [C/C++ Application]
Enter a number: 0
You entered zero.
```

```
Ex_5.c
1 /*
2  * Ex_5.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     char ch;
12     printf("Enter a character: ");
13     fflush(stdout);
14     scanf("%c", &ch);
15     if((ch >= 97 && ch <= 122) || (ch >= 65 && ch <= 90))
16         printf("%c is an alphabet", ch);
17     else
18         printf("%c is not an alphabet", ch);
19
20     return 0;
21 }
22
```

Console

```
<terminated> (exit value: 0) Ex_5.exe [C/C++ Application]
Enter a character: 4
4 is not an alphabet
```

```
Ex_5.c
1 /*
2  * Ex_5.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     char ch;
12     printf("Enter a character: ");
13     fflush(stdout);
14     scanf("%c", &ch);
15     if((ch >= 97 && ch <= 122) || (ch >= 65 && ch <= 90))
16         printf("%c is an alphabet", ch);
17     else
18         printf("%c is not an alphabet", ch);
19
20     return 0;
21 }
22
```

Console

```
<terminated> (exit value: 0) Ex_5.exe [C/C++ Application]
Enter a character: k
k is an alphabet
```

```
Ex_6.c
1 /*
2  * Ex_6.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     int num, sum = 0;
12     printf("Enter an integer: ");
13     fflush(stdout);
14     scanf("%d", &num);
15     for(int i = 1; i <= num; i++){
16         sum += i;
17     }
18     printf("Sum = %d", sum);
19     return 0;
20 }
21
```

Console

```
<terminated> (exit value: 0) Ex_6.exe [C/C++ Application]
Enter an integer: 60
Sum = 1830
```

```
Ex_7.c
1 /*
2  * Ex_7.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     int num, fact = 1;
12     printf("Enter an integer: ");
13     fflush(stdout);
14     scanf("%d", &num);
15     if(num < 0)
16         printf("Error!!! Factorial of negative number does not exist");
17     else{
18         for(int i = 1; i <= num; i++){
19             fact *= i;
20         }
21         printf("Factorial = %d", fact);
22     }
23     return 0;
24 }
25
```

Console

```
<terminated> (exit value: 0) Ex_7.exe [C/C++ Application]
Enter an integer: 10
Factorial = 3628800
```

```
Ex_8.c
1 /*
2  * Ex_8.c
3  *
4  * Created on: Jul 31, 2021
5  * Author: Sarah
6  */
7
8 #include <stdio.h>
9
10 int main(){
11     char choice;
12     float x, y;
13     printf("Enter operator either + or - or * or /: ");
14     fflush(stdout);
15     scanf("%c", &choice);
16     printf("Enter two operands: ");
17     fflush(stdout);
18     scanf("%f %f", &x, &y);
19     switch(choice){
20         case '+':{
21             printf("%f + %f = %f", x, y, x + y);
22             break;
23         }
24         case '-':{
25             printf("%f - %f = %f", x, y, x - y);
26             break;
27         }
28         case '*':{
29             printf("%f * %f = %f", x, y, x * y);
30             break;
31         }
32         case '/':{
33             printf("%f / %f = %f", x, y, x / y);
34             break;
35         }
36     }
37     return 0;
38 }
39
```

Console

```
<terminated> (exit value: 0) Ex_8.exe [C/C++ Application]
Enter operator either + or - or * or /: *
Enter two operands: 2 3
2.000000 * 3.000000 = 6.000000
```