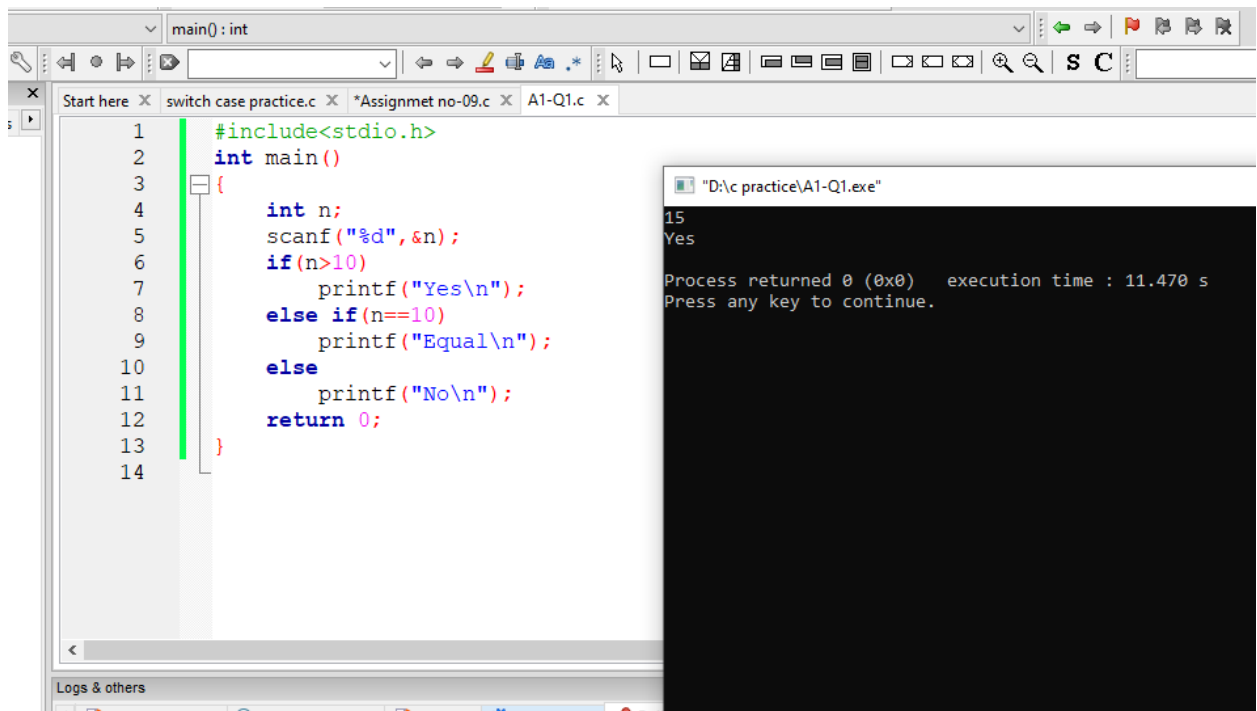


1. Take an integer number from the user and check if the number is bigger than 10 or not.

```
#include<stdio.h>
int main()
{
    int n;
    scanf("%d",&n);
    if(n>10)
        printf("Yes\n");
    else if(n==10)
        printf("Equal\n");
    else
        printf("No\n");
    return 0;
}
```



The screenshot shows a Windows IDE with a C program being executed. The code is as follows:

```
1  #include<stdio.h>
2  int main()
3  {
4      int n;
5      scanf("%d",&n);
6      if(n>10)
7          printf("Yes\n");
8      else if(n==10)
9          printf("Equal\n");
10     else
11         printf("No\n");
12     return 0;
13 }
14
```

The output window shows the following text:

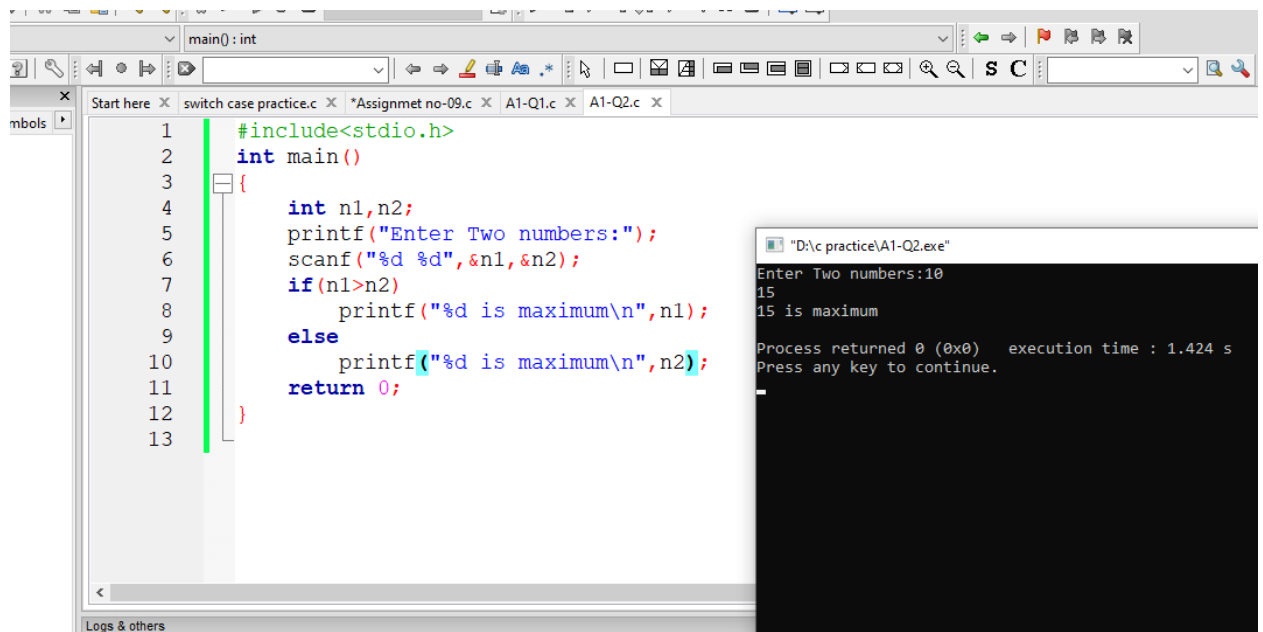
```
"D:\c practice\A1-Q1.exe"
15
Yes

Process returned 0 (0x0)   execution time : 11.470 s
Press any key to continue.
```

2. Take two numbers from the users and find the maximum and minimum number of those two numbers.

```
#include<stdio.h>

int main()
{
    int n1,n2;
    printf("Enter Two numbers:");
    scanf("%d %d",&n1,&n2);
    if(n1>n2)
        printf("%d is maximum\n",n1);
    else
        printf("%d is maximum\n",n2);
    return 0;
}
```



The screenshot shows a code editor with a C program and a separate window showing its execution. The code in the editor is as follows:

```
1  #include<stdio.h>
2  int main()
3  {
4      int n1,n2;
5      printf("Enter Two numbers:");
6      scanf("%d %d",&n1,&n2);
7      if(n1>n2)
8          printf("%d is maximum\n",n1);
9      else
10         printf("%d is maximum\n",n2);
11     return 0;
12 }
13
```

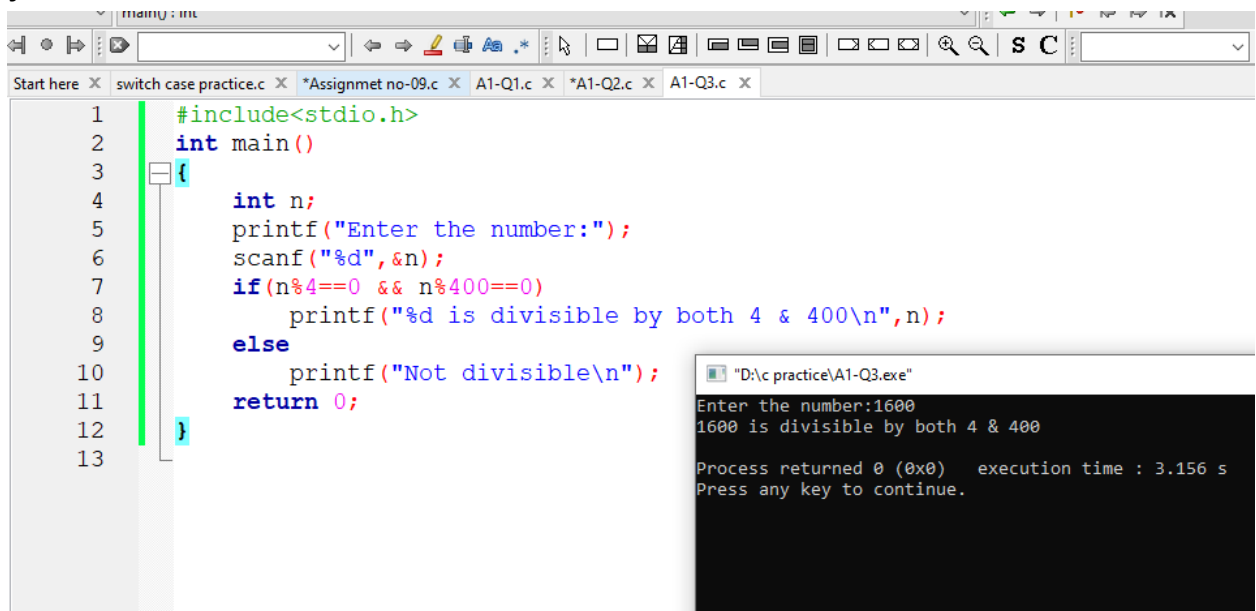
The execution window, titled "D:\c practice\A1-Q2.exe", shows the following output:

```
Enter Two numbers:10
15
15 is maximum
Process returned 0 (0x0)   execution time : 1.424 s
Press any key to continue.
```

3. Write a C program to check whether a given number is divisible by 4 and 400.

```
#include<stdio.h>

int main()
{
    int n;
    printf("Enter the number:");
    scanf("%d",&n);
    if(n%4==0 && n%400==0)
        printf("%d is divisible by both 4 & 400\n",n);
    else
        printf("Not divisible\n");
    return 0;
}
```



```
1  #include<stdio.h>
2  int main()
3  {
4      int n;
5      printf("Enter the number:");
6      scanf("%d",&n);
7      if(n%4==0 && n%400==0)
8          printf("%d is divisible by both 4 & 400\n",n);
9      else
10         printf("Not divisible\n");
11     return 0;
12 }
13
```

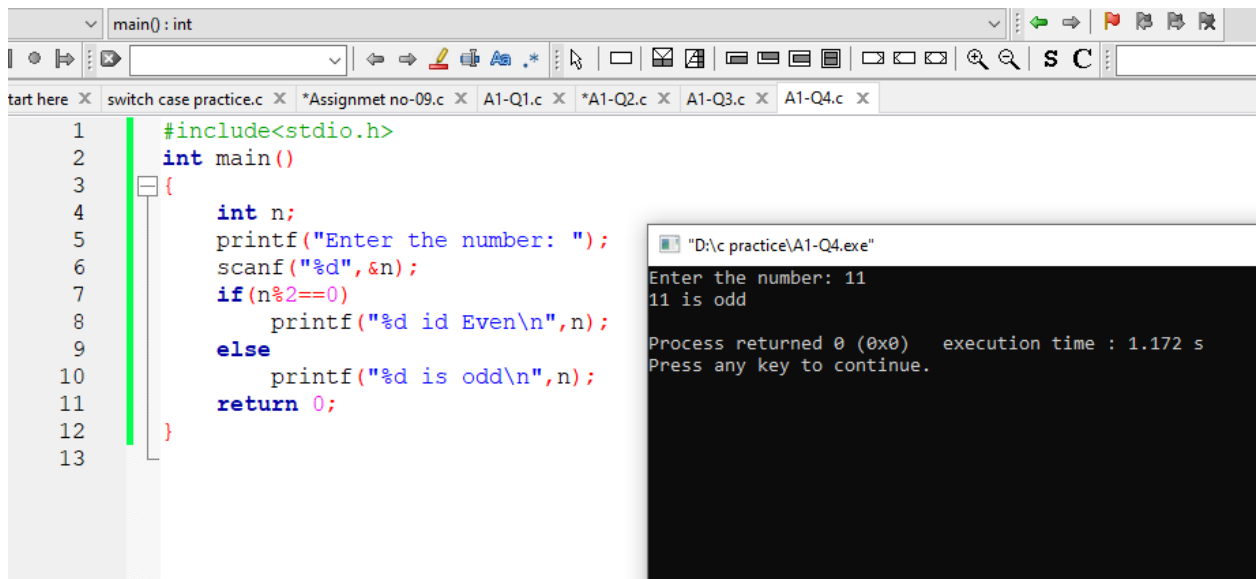
"D:\c practice\A1-Q3.exe"

Enter the number:1600
1600 is divisible by both 4 & 400

Process returned 0 (0x0) execution time : 3.156 s
Press any key to continue.

4. Write a C program to check whether the number is even or odd

```
#include<stdio.h>
int main()
{
    int n;
    printf("Enter the number: ");
    scanf("%d",&n);
    if(n%2==0)
        printf("%d id Even\n",n);
    else
        printf("%d is odd\n",n);
    return 0;
}
```



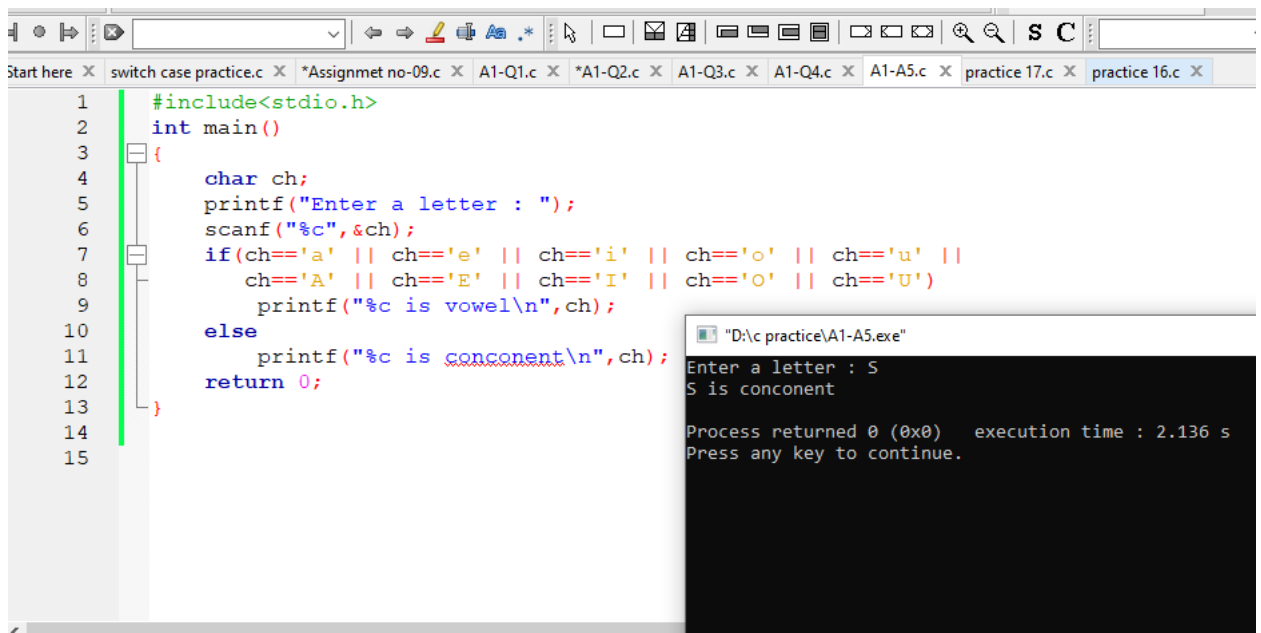
The screenshot shows a C program being compiled and executed. The code is in a file named 'A1-Q4.c' and is being run in a terminal window. The output shows that the number 11 is odd.

```
1  #include<stdio.h>
2  int main()
3  {
4      int n;
5      printf("Enter the number: ");
6      scanf("%d",&n);
7      if(n%2==0)
8          printf("%d id Even\n",n);
9      else
10         printf("%d is odd\n",n);
11     return 0;
12 }
13
```

Process returned 0 (0x0) execution time : 1.172 s
Press any key to continue.

5. Take a letter as input from the user and determine whether that letter is a vowel or consonant

```
#include<stdio.h>
int main()
{
    char ch;
    printf("Enter a letter : ");
    scanf("%c",&ch);
    if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u' ||
       ch=='A' || ch=='E' || ch=='I' || ch=='O' || ch=='U')
        printf("%c is vowel\n",ch);
    else
        printf("%c is conconent\n",ch);
    return 0;
}
```



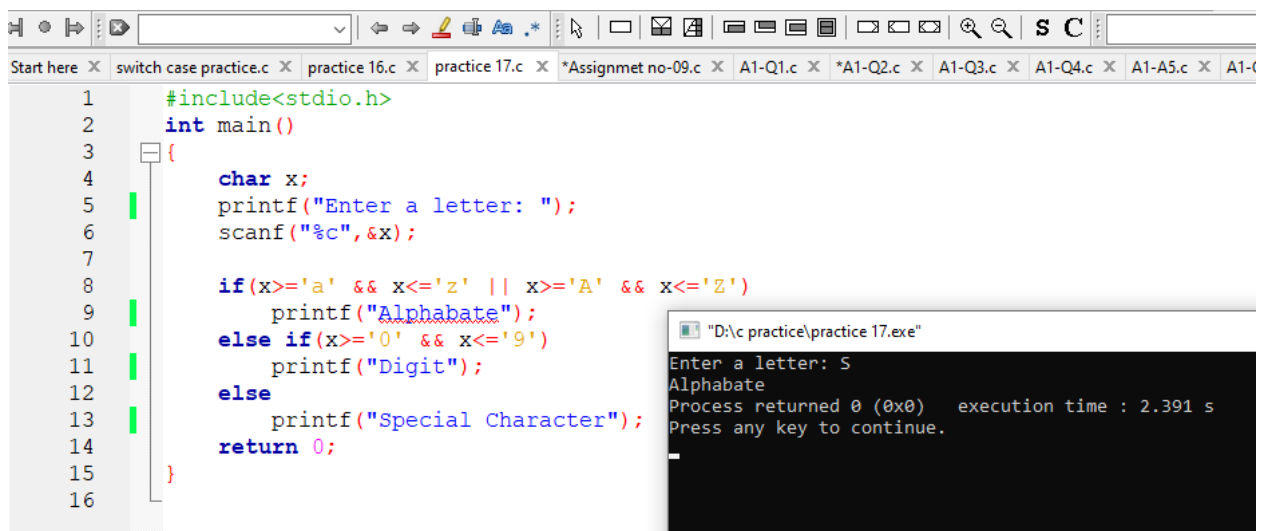
The screenshot shows a code editor with a C program that checks if a letter is a vowel or a consonant. The program is saved as 'practice 16.c'. The terminal window shows the execution of the program, where the user enters 'S' and the program outputs 'S is conconent'. The program returns 0 and takes 2.136 seconds to execute.

```
1 #include<stdio.h>
2 int main()
3 {
4     char ch;
5     printf("Enter a letter : ");
6     scanf("%c",&ch);
7     if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u' ||
8        ch=='A' || ch=='E' || ch=='I' || ch=='O' || ch=='U')
9         printf("%c is vowel\n",ch);
10    else
11        printf("%c is conconent\n",ch);
12    return 0;
13 }
14
15
```

Enter a letter : S
S is conconent
Process returned 0 (0x0) execution time : 2.136 s
Press any key to continue.

6. Write a C program to check whether a character is an alphabet, digit, or special character

```
#include<stdio.h>
int main()
{
    char x;
    printf("Enter a letter: ");
    scanf("%c",&x);
    if(x>='a' && x<='z' || x>='A' && x<='Z')
        printf("Alphabate");
    else if(x>='0' && x<='9')
        printf("Digit");
    else
        printf("Special Character");
    return 0;
}
```



The screenshot shows a code editor with a C program and a separate window showing its execution. The code in the editor is as follows:

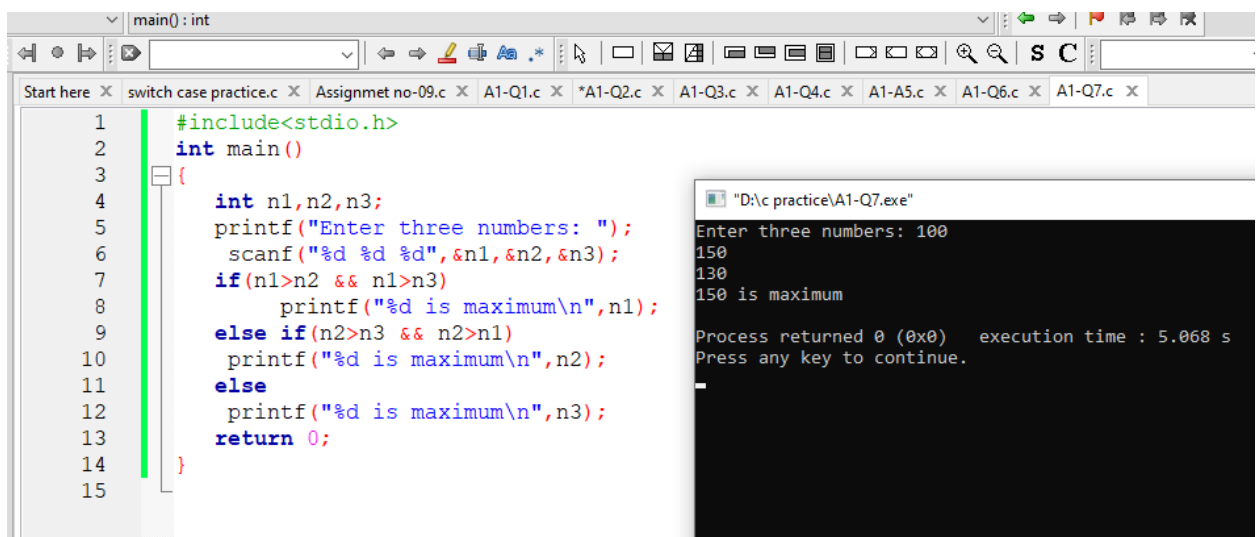
```
1  #include<stdio.h>
2  int main()
3  {
4      char x;
5      printf("Enter a letter: ");
6      scanf("%c",&x);
7
8      if(x>='a' && x<='z' || x>='A' && x<='Z')
9          printf("Alphabate");
10     else if(x>='0' && x<='9')
11         printf("Digit");
12     else
13         printf("Special Character");
14     return 0;
15 }
16
```

The execution window, titled "D:\c practice\practice 17.exe", shows the following output:

```
Enter a letter: S
Alphabate
Process returned 0 (0x0)   execution time : 2.391 s
Press any key to continue.
```

7. Take Three numbers from the user and find the maximum number among those three numbers using nested if else.

```
#include<stdio.h>
int main()
{
    int n1,n2,n3;
    printf("Enter three numbers: ");
    scanf("%d %d %d",&n1,&n2,&n3);
    if(n1>n2 && n1>n3)
        printf("%d is maximum\n",n1);
    else if(n2>n3 && n2>n1)
        printf("%d is maximum\n",n2);
    else
        printf("%d is maximum\n",n3);
    return 0;
}
```



The screenshot shows a C program being compiled and executed. The code is the same as the one above. The output window shows the program execution with input values 100, 150, and 130, and the output '150 is maximum'.

```
main() : int
1  #include<stdio.h>
2  int main()
3  {
4      int n1,n2,n3;
5      printf("Enter three numbers: ");
6      scanf("%d %d %d",&n1,&n2,&n3);
7      if(n1>n2 && n1>n3)
8          printf("%d is maximum\n",n1);
9      else if(n2>n3 && n2>n1)
10         printf("%d is maximum\n",n2);
11      else
12         printf("%d is maximum\n",n3);
13      return 0;
14  }
15
```

"D:\c practice\A1-Q7.exe"

```
Enter three numbers: 100
150
130
150 is maximum

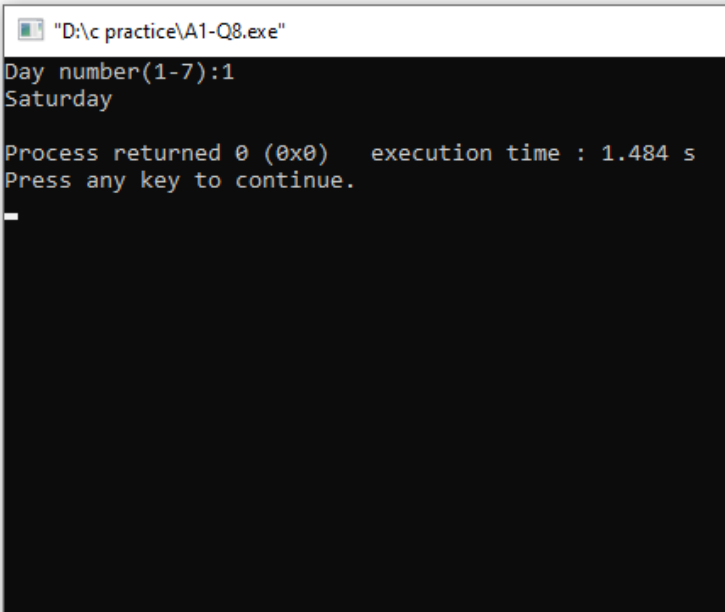
Process returned 0 (0x0)   execution time : 5.068 s
Press any key to continue.
```

8,Write a C program to print the day of the week's name using the switch case.

```
#include<stdio.h>
int main()
{
    int n;
    printf("Day number(1-7):");
    scanf("%d",&n);
    switch(n)
    {
        case 1:
            printf("Saturday\n");
            break;
        case 2:
            printf("Sunday\n");
            break;
        case 3:
            printf("Monday\n");
            break;
        case 4:
            printf("Tuesday\n");
            break;
        case 5:
            printf("Wednesday\n");
            break;
        case 6:
            printf("Thursday\n");
            break;
        case 7:
            printf("Friday\n");
            break;
        default:
            printf("Not a correct option");
    }
}
```



```
}  
#include<stdio.h>  
int main()  
{  
    int n;  
    printf("Day number(1-7):");  
    scanf("%d",&n);  
    switch(n)  
    {  
        case 1:  
            printf("Saturday\n");  
            break;  
        case 2:  
            printf("Sunday\n");  
            break;  
        case 3:  
            printf("Monday\n");  
            break;  
        case 4:  
            printf("Tuesday\n");  
            break;  
        case 5:  
            printf("Wednesday\n");  
            break;  
        case 6:  
            printf("Thursday\n");  
            break;  
        case 7:  
            printf("Friday\n");  
            break;  
        default:  
            printf("Not a correct option");  
    }  
}
```



9,Write a C program to create a calculator using switch case and functions

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

```
int main()
```

```
{
```

```
    float a,b;
```

```
    char c;
```

```
    scanf("%f %c %f",&a,&c,&b);
```

```
    switch(c)
```

```
    {
```

```
    case '-':
```

```
        printf("%.3f\n",a-b);
```

```
        break;
```

```

case '+':

    printf("%.3f\n", (a+b));

    break;

case '*':

    printf("%.3f\n", (a*b));

    break;

case '/':

    printf("%.3f\n", a/b);

    break;

default :

    printf("Not match\n");

}

}

```

The screenshot shows a C++ IDE with a file named 'switch case practice.c'. The code is as follows:

```

1  #include<stdio.h>
2  int main()
3  {
4      float a,b;
5      char c;
6      scanf("%f %c %f", &a, &c, &b);
7      switch(c)
8      {
9          case '-':
10             printf("%.3f\n", a-b);
11             break;
12          case '+':
13             printf("%.3f\n", (a+b));
14             break;
15          case '*':
16             printf("%.3f\n", (a*b));
17             break;
18          case '/':
19             printf("%.3f\n", a/b);
20             break;
21          default :
22             printf("Not match\n");
23      }
24  }
25
26

```

The IDE also shows a terminal window titled "D:\c practice\A1-Q9.exe" with the following output:

```

10.02-1
9.020

Process returned 0 (0x0)   execution time : 1.609 s
Press any key to continue.

```

Name:Ashraful Islam Redoy
ID:0242320005101178