

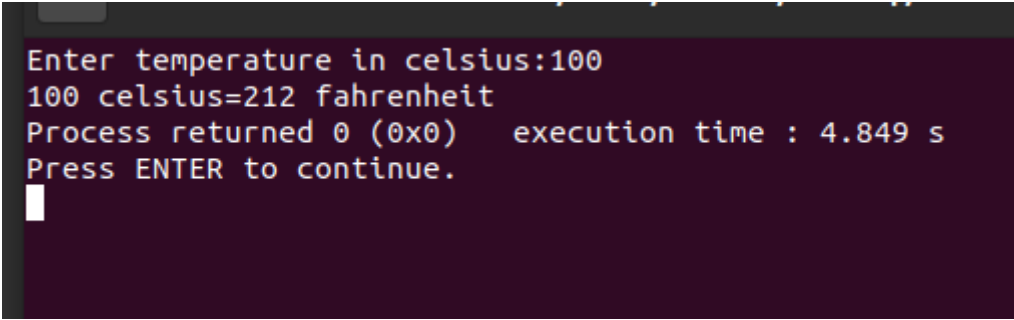
Question 01:

Write a C program to input temperature in Centigrade and convert to Fahrenheit.

Source code:

```
#include<stdio.h>
int main()
{
    float celsius,fahrenheit;
    printf("Enter temperature in celsius:");
    scanf("%f",&celsius);
    fahrenheit=(celsius*9/5)+32;
    printf("%.0f celsius=%.0f fahrenheit",celsius,fahrenheit);
    return 0;
}
```

output:



```
Enter temperature in celsius:100
100 celsius=212 fahrenheit
Process returned 0 (0x0)   execution time : 4.849 s
Press ENTER to continue.
█
```

Question 02:

Write a c program to input radius of a circle from user input and find the diameter, circumference and area of the circle.

Source code:

```
#include <stdio.h>
int main()
{
    float radius,diameter, circumference, area;
    printf("Enter radius:");
    scanf("%f",&radius);
    diameter=2*radius;
    circumference=2*3.14*radius;
    area=3.14*radius*radius;
    printf("Diameter=%.2f units \n",diameter);
    printf("Circumference=%.2f units \n",circumference);
    printf("Area=%.2f sq.units \n",area);
    return 0;
}
```

Output:

```
Enter radius:10
Diameter=20.00 units
Circumference=62.80 units
Area=314.00 sq.units

Process returned 0 (0x0)   execution time : 6.295 s
Press ENTER to continue.
```

Question 03:

Write a c program to input any two numbers from user and swap values of both numbers using arithmetic operators.

Source code:

```
#include <stdio.h>
int main()
{
    int a,b;
    printf("Enter two numbers:");
    scanf("%d%d",&a,&b);
    printf("Before swapping:a=%d,b=%d\n",a,b);
    a=a+b;
    b=a-b;
    a=a-b;
    printf("After swapping:a=%d,b=%d\n",a,b);
    return 0;
}
```

output:

```
Enter two numbers:10
15
Before swapping:a=10,b=15
After swapping:a=15,b=10

Process returned 0 (0x0)   execution time : 9.552 s
Press ENTER to continue.
```

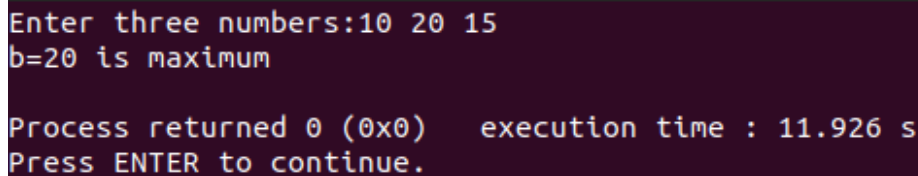
Question 04:

Write a c program to find maximum between three numbers using if or nested if.

Source code:

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

Output:



```
Enter three numbers:10 20 15
b=20 is maximum

Process returned 0 (0x0)    execution time : 11.926 s
Press ENTER to continue.
```

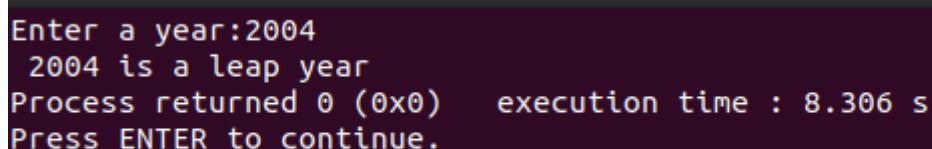
Question 05:

Write a c program to check a given year is leap year or not.

Source code:

```
#include <stdio.h>
int main()
{
    int year;
    printf("Enter a year:");
    scanf("%d",&year);
    if((year%4==0 && year%100!=0)||year%400==0)
        printf(" %d is a leap year",year);
    else
        printf(" %d is not a leap year",year);
    return 0;
}
```

Output:



```
Enter a year:2004
2004 is a leap year
Process returned 0 (0x0)    execution time : 8.306 s
Press ENTER to continue.
```

```
Enter a year:2025
2025 is not a leap year
Process returned 0 (0x0)    execution time : 8.346 s
Press ENTER to continue.
```

Question 06:

Write a c program to input a character from user and check whether given character is alphabet, digit or special character.

Source code:

```
#include <stdio.h>
int main()
{
    char ch;
    printf("Enter any character:");
    scanf("%c",&ch);
    if((ch>='a'&& ch<='z' )||(ch>='A'&& ch<='Z'))
        printf("%c is an Alphabet",ch);
    else if (ch>='0'&& ch<='9')
        printf("%c is a digit",ch);
    else
        printf("%c is a special character",ch);
    return 0;
}
```

Output:

```
Enter any character:A
A is an Alphabet
Process returned 0 (0x0)    execution time : 36.628 s
Press ENTER to continue.
```

```
Enter any character:6
6 is a digit
Process returned 0 (0x0)    execution time : 8.781 s
Press ENTER to continue.
```

```
Enter any character:*
* is a special character
Process returned 0 (0x0)    execution time : 11.210 s
Press ENTER to continue.
```

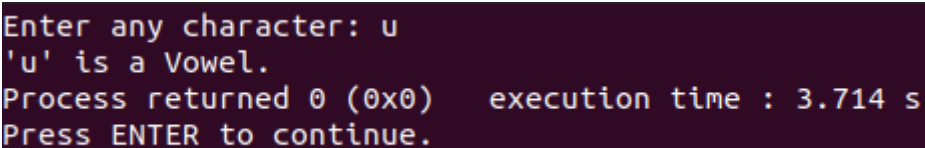
Question 07:

Write a C program to check whether an alphabet is vowel or consonant using.

Source code:

```
#include <stdio.h>
int main()
{
    char ch;
    printf("Enter any character: ");
    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 a Vowel.", ch);
    else if((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z'))
        printf("%c' is a Consonant.", ch);
    else
        printf("%c' is not an alphabet.", ch);
    return 0;
}
```

Output:

A screenshot of a terminal window with a dark purple background. The text is displayed in a monospaced font with syntax highlighting: 'Enter any character: u' in white, ''u' is a Vowel.' in yellow, 'Process returned 0 (0x0)' in green, 'execution time : 3.714 s' in green, and 'Press ENTER to continue.' in white.

```
Enter any character: u
'u' is a Vowel.
Process returned 0 (0x0)    execution time : 3.714 s
Press ENTER to continue.
```

Question 08:

Write a C program to check whether a number is even or odd using if else.

Source code:

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

Output:

```
Enter a number:10
10 is a even number
Process returned 0 (0x0)   execution time : 5.473 s
Press ENTER to continue.
█
```

```
Enter a number:5
5 is a odd number
Process returned 0 (0x0)   execution time : 3.059 s
Press ENTER to continue.
█
```

Question 09:

Write a C program to input week number(1-7) and print day of week name using switch case.

Source code:

```
#include <stdio.h>
int main()
{
    int week;
    printf("Enter week number(1-7): ");
    scanf("%d", &week);
    switch(week)
    {
        case 1:
            printf("Monday");
            break;
        case 2:
            printf("Tuesday");
            break;
        case 3:
            printf("Wednesday");
            break;
        case 4:
            printf("Thursday");
            break;
        case 5:
            printf("Friday");
            break;
        case 6:
            printf("Saturday");
            break;
        case 7:
            printf("Sunday");
            break;
    }
}
```

```

        default:
            printf("Invalid input! Please enter week number between 1-7.");
        }
    return 0;
}

```

Output:

```

Enter week number(1-7): 4
Thursday
Process returned 0 (0x0)   execution time : 6.911 s
Press ENTER to continue.

```

Question 10:

Write a C program to input any number from user and check whether the given number is positive, negative or zero.

Source code:

```

#include <stdio.h>
int main()
{
    int a;
    printf("Enter a number:");
    scanf("%d",&a);
    if(a>0)
        printf("%d is a Positive number",a);
    else if(a<0)
        printf("%d is a Negative number",a);
    else
        printf("%d is Zero",a);
    return 0;
}

```

Output:

```

Enter a number:3
3 is a Positive number
Process returned 0 (0x0)   execution time : 13.591 s
Press ENTER to continue.

```