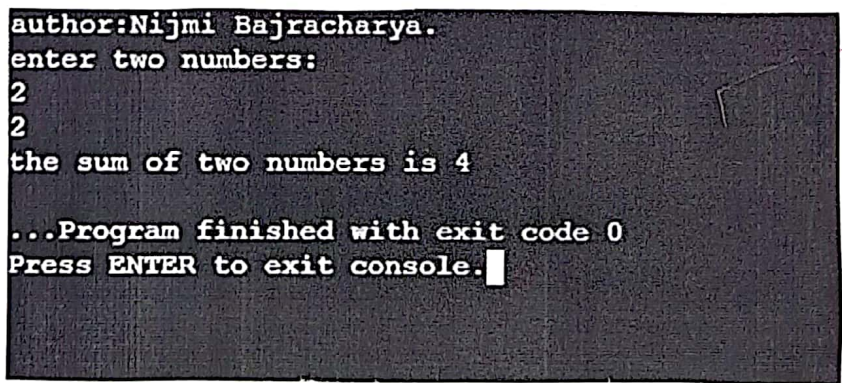


1) WAP to find the sum of two numbers using function named sum().

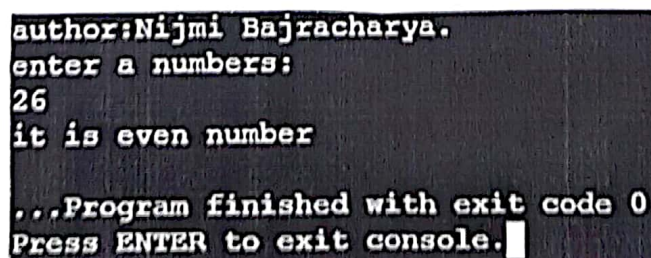
```
→ #include <stdio.h>
void sum();
int main()
{
    sum();
    return 0;
}
void sum()
{
    printf("author: Nijmi Bajracharya.\n");
    int a, b;
    printf("enter two numbers:\n");
    scanf("%d %d", &a, &b);
    printf("the sum of two numbers is %d", a+b);
}
```



```
author:Nijmi Bajracharya.
enter two numbers:
2
2
the sum of two numbers is 4
...Program finished with exit code 0
Press ENTER to exit console.
```

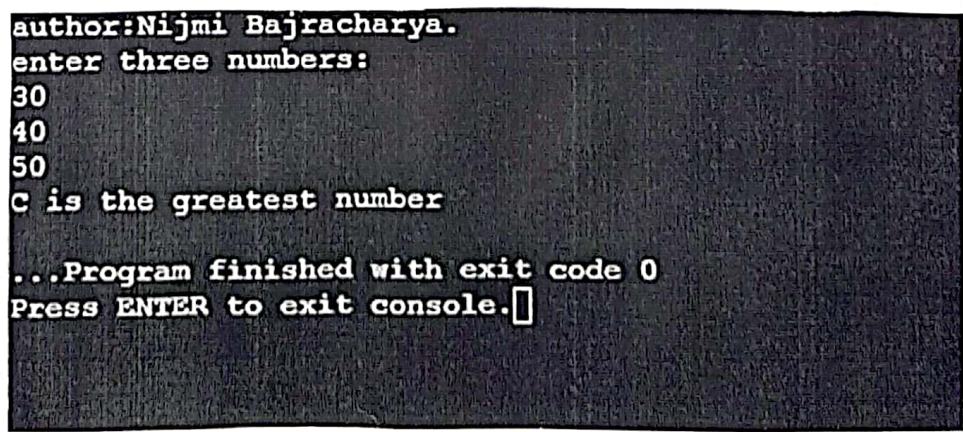
2) WAP to know a number is even or odd using function named evenodd().

```
→ #include <stdio.h>
void evenodd();
int main()
{
    evenodd();
    return 0;
}
void evenodd()
{
    printf("author: Nijmi Bajracharya.\n");
    int n;
    printf("enter a number:\n");
    scanf("%d", &n);
    if (n % 2 == 0)
    {
        printf("it is even number");
    }
    else
        printf("it is odd number");
}
```

A screenshot of a terminal window showing the output of the C program. The text is as follows:
author: Nijmi Bajracharya.
enter a numbers:
26
it is even number
...Program finished with exit code 0
Press ENTER to exit console.
A red arrow points from the code block above to this screenshot.

3) WAP to print the greatest value among three numbers using a function `int great()`.

```
→ #include <stdio.h>
int great();
int main()
{
    great();
    return();
}
int great()
{
    printf("author:Nijmi Bajracharya.\n");
    int a,b,c;
    printf("enter three numbers:\n");
    scanf("%d %d %d", &a, &b, &c);
    if(a > b && a > c)
    {
        printf("A is the greatest number");
    }
    else if(b > a && b > c)
    {
        printf("B is the greatest number");
    }
    else
    {
        printf("C is the greatest number");
    }
}
```

A screenshot of a terminal window showing the output of the C program. The text is as follows:
author:Nijmi Bajracharya.
enter three numbers:
30
40
50
C is the greatest number

...Program finished with exit code 0
Press ENTER to exit console.
The screenshot is taken from a dark-themed terminal with white text. There are some red lines drawn on the page to the right of the screenshot.

```
author:Nijmi Bajracharya.
enter three numbers:
30
40
50
C is the greatest number

...Program finished with exit code 0
Press ENTER to exit console.
```

4) WAP to know a number is prime or composite number using function.

→ #include <stdio.h>

void num();

int main()

{

num();

return 0;

}

void num()

{

printf("author: Nijmi Bajracharya.\n");

int n, i, a = 0;

printf("enter a number:\n");

scanf("%d", &n);

for (i = 1; i <= n; i++)

{

if (n % i == 0)

a = a + 1;

}

if (a == 2)

printf("The number is PRIME");

else

printf("The number is COMPOSITE");

}

author: Nijmi Bajracharya.

enter a number:

20

The number is COMPOSITE

...Program finished with exit code 0

Press ENTER to exit console. □

5) WAP to find the sum of series 1,2,3...200 using function. Assume yourself function name. It returns an integer value.

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

```
int sum();
```

```
int main()
```

```
{
```

```
    printf("author: Nijmi Bajracharya.\n");
```

```
    sum();
```

```
    printf("the sum of numbers from 1,2,3...200 is '%d'",
```

```
        sum());
```

```
    return 0;
```

```
}
```

```
int sum()
```

```
{
```

```
    int i, s=0;
```

```
    for (i=0; i<=200; i++)
```

```
    {
```

```
        s=s+i;
```

```
    }
```

```
    return s;
```

```
}
```

```
author:Nijmi Bajracharya.
```

```
the sum of numbers from 1,2,3...200 is 20100
```

```
...Program finished with exit code 0
```

```
Press ENTER to exit console.
```

6) WAP to input elements of array and print them with their sum. Suppose, the array is one dimensional array-elements().

```
#include <stdio.h>
void array-elements(),
int main()
{
    array-elements();
    return 0;
}
void array-elements()
{
    printf("author: Nijmi Bajracharya.\n");
    int a[100];
    int size, i;
    printf("enter the size:\n");
    scanf("%d", &size);
    printf("enter array elements:\n");
    for(i=0; i<5; i++)
    {
        scanf("%d", &a[i]);
    }
    printf("array elements are:\n");
    for(i=0; i<size; i++)
    {
        printf("%d\t", a[i]);
    }
}
```

author: Nijmi Bajracharya

enter the size:

5

enter array elements:

1

2

3

4

5

array elements are:

1

2

3

4

5

9 ...Program finished with exit code 0
Press ENTER to exit console.

7) Suppose a function `void matrix_sum(int a[], int b[][[]])`. Here, we have passed array as parameter. Use this function to find sum of matrix.

```
#include <stdio.h>
int size;
void matrix_sum(int a[100][100], int b[100][100]);
int main()
{
    printf("author: Nijmi Bajracharya.\n");
    int i, j, a[100][100], b[100][100];
    printf("Enter the size of array for rows and column\n");
    scanf("%d", &size);
    for(i=0; i<size; i++)
    {
        for(j=0; j<size; j++)
        {
            printf("enter [%d][%d] element for first matrix\n", i+1, j+1);
            scanf("%d", &a[i][j]);
        }
    }
    for(i=0; i<size; i++)
    {
        for(j=0; j<size; j++)
        {
            printf("enter [%d][%d] element for second matrix\n", i+1, j+1);
            scanf("%d", &b[i][j]);
        }
    }
    matrix_sum(a, b);
    return 0;
}
```



```

void matrix_sum (int c[100][100], int d[100][100])
{
    int i, j;
    printf("The sum is:\n");
    for(i=0; i<size; i++)
    {
        for(j=0; j<size; j++)
        {
            printf("%d", c[i][j]+d[i][j]);
        }
        printf("\n");
    }
}

```

```

author:Nijmi Bajracharya.
Enter size of array for rows and column
2
enter [1][1] element for first matrix
1
enter [1][2] element for first matrix
2
enter [2][1] element for first matrix
3
enter [2][2] element for first matrix
4
enter [1][1] element for second matrix
1
enter [1][2] element for second matrix
2
enter [2][1] element for second matrix
3
enter [2][2] element for second matrix
4
The sum is :
2 4
6 8

```

```

...Program finished with exit code 0
Press ENTER to exit console.

```


8) WAP to sort 'n' number of strings using function. Pass a parameter.

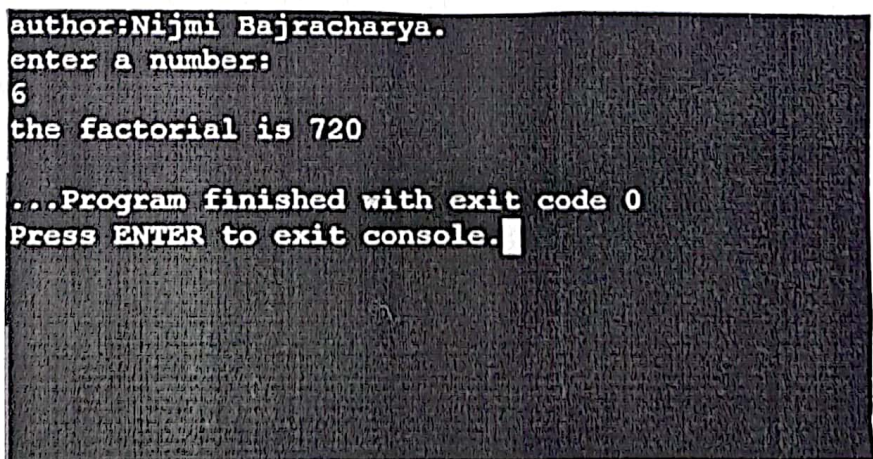
```
#include <stdio.h>
#include <string.h>
int n;
void string(char a[][100]);
int main()
{
    printf("author: Nijmi Bajracharya.\n");
    printf("Enter number of strings to sort\n");
    scanf("%d", &n);
    char a[n][100];
    for(int i=0; i<n; i++)
    {
        printf("Enter [%d] string\n", i+1);
        scanf("%s", a[i]);
    }
    string(a);
}
void string(char c[][100])
{
    printf("The sorted string is:\n");
    int i, j;
    char temp[100];
    for(i=0; i<n; i++)
    {
        for(j=i+1; j<n; j++)
        {
            if(strcmp(c[i], c[j]) > 0)
            {
                strcpy(temp, c[i]);
                strcpy(c[i], c[j]);
                strcpy(c[j], temp);
            }
        }
    }
}
```

```
{  
{  
}  
for(i=0; i<n; i++)  
{ printf("%s", c[i]),  
}  
}
```

```
author:Nijmi Bajracharya.  
Enter number of strings to sort  
5  
Enter [1] string  
apple  
Enter [2] string  
mango  
Enter [3] string  
orange  
Enter [4] string  
guava  
Enter [5] string  
pineapple  
The sorted string is :  
apple guava mango orange pineapple  
...Program finished with exit code 0  
Press ENTER to exit console.█
```

9) WAP to find the factorial value of a number using recursive function.

```
#include <stdio.h>
void factorial (int n);
int main()
{
    printf("author: Nijmi Bajracharya.\n");
    int number;
    printf("enter a number.\n");
    scanf("%d", &number);
    factorial (number);
    return 0;
}
void factorial (int n)
{
    auto int i, f=1;
    for (i=1; i<=n; i++)
    {
        f=f*i;
    }
    printf("the factorial is %d", f);
}
```



```
author:Nijmi Bajracharya.
enter a number:
6
the factorial is 720

...Program finished with exit code 0
Press ENTER to exit console.
```