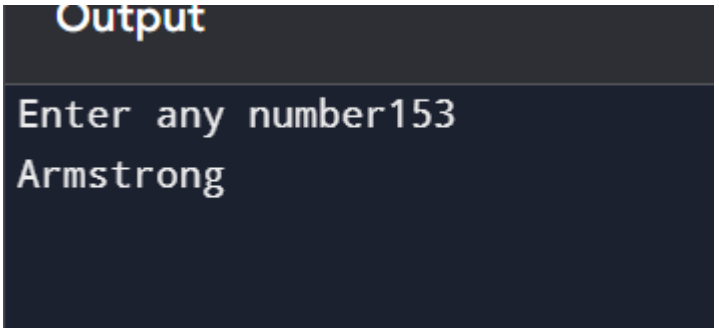
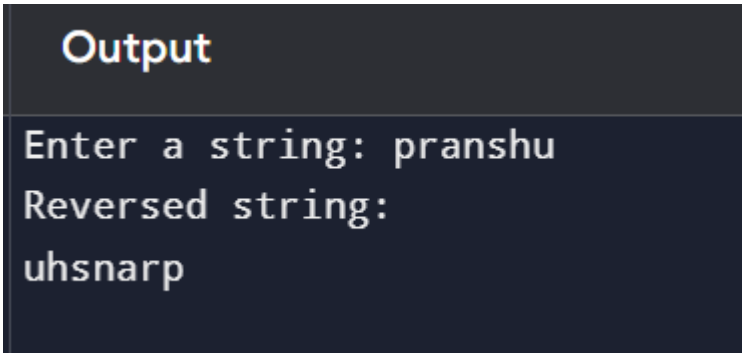
1.check whether a number is armstrong

```
#include<stdio.h>
#include <math.h>
int main()
{
    int num, temp, sum = 0, digit, n = 0;
    printf("Enter any number");
    scanf("%d", &num);
    temp = num;


    for (int t = num; t > 0; t /= 10) n++;


    for (int t = num; t > 0; t /= 10) {

     digit = t % 10;
        sum += pow(digit, n);
    }

    printf(sum == num ? "Armstrong\n" : "Not Armstrong\n");
    return 0;
}
```



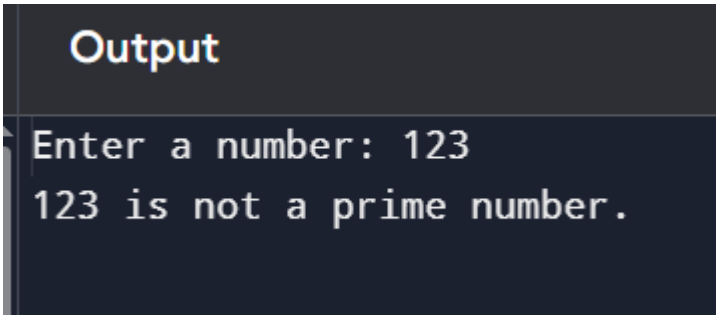
2.Reverse a given string

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

int main()
{
    char str[100], temp;
    int i, len;

    printf("Enter a string: ");
    fgets(str, sizeof(str), stdin);


    len = strlen(str);
    for(i = 0; i < len / 2; i++) {
        temp = str[i];
        str[i] = str[len - i - 1];
        str[len - i - 1] = temp;
    }

    printf("Reversed string: %s\n", str);
    return 0;
}
```



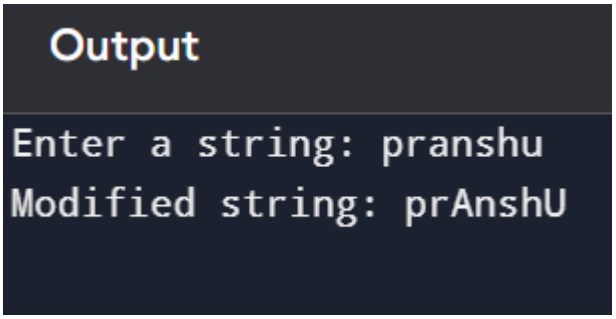
3.check whether a number is prime

```
#include <stdio.h>

int main() {
    int n, i, isPrime = 1;
    printf("Enter a number: ");
    scanf("%d", &n);

    if (n <= 1) isPrime = 0;
    else {
        for (i = 2; i * i <= n; i++) {
            if (n % i == 0) {
                isPrime = 0;
                break;
            }
        }
    }

    if (isPrime)
    printf("%d is a prime number.\n", n);

    else

    printf("%d is not a prime number.\n", n);

    return 0;
}
```



4.convert all vowels in a string to uppercase

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

int main() {
    char str[100];
    int i = 0;

    printf("Enter a string: ");
    fgets(str, sizeof(str), stdin);

    while (str[i] != '\0')
    {

        char ch = tolower(str[i]);
        if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u') {
            str[i] = toupper(str[i]);
        }

        i++;
    }

    printf("Modified string: %s", str);
    return 0;
}
```



5.count the number of words in a string

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

int main() {
    char str[1000];
    int i = 0, p = 0;
    int c = 0;

    printf("Enter a string: ");
    fgets(str, sizeof(str), stdin);

    while (str[i] != '\0')
    {
        if (isspace(str[i]))
        {
            c = 0;
        }
        else if (c == 0)
        {
            c = 1;
            p++;
        }
        i++;
    }

    printf("Number of words: %d\n", p);

    return 0;
}
```

Output

```
Enter a string: my name is pranshu
Number of words: 4
```

6.Add two matrix

```
#include<stdio.h>
int main() {
   int m, n, i, j;
   printf("Enter the number of rows and columns of the matrix: ");
   scanf("%d %d", &m, &n);

   int A[m][n], B[m][n], C[m][n];
   printf("Enter elements of first matrix (A):\n");
   for(i = 0; i < m; i++) {
      for(j = 0; j < n; j++) {
         printf("A[%d][%d]: ", i, j);
         scanf("%d", &A[i][j]);
      }
   }
   printf("Enter elements of second matrix (B):\n");
   for(i = 0; i < m; i++) {
      for(j = 0; j < n; j++) {
         printf("B[%d][%d]: ", i, j);
         scanf("%d", &B[i][j]);
      }
   }
   for(i = 0; i < m; i++) {
      for(j = 0; j < n; j++) {
         C[i][j] = A[i][j] + B[i][j];
      }
   }
   printf("Add two matrix (A + B):\n");
   for(i = 0; i < m; i++) {
      for(j = 0; j < n; j++) {
         printf("%d\t", C[i][j]);
      }
      printf("\n");
   }
   return 0;
}
```

Output

```
Enter the number of rows and columns of the matrix: 2
2
Enter elements of first matrix (A):
A[0][0]: 1
A[0][1]: 2
A[1][0]: 3
A[1][1]: 4
Enter elements of second matrix (B):
B[0][0]: 1
B[0][1]: 2
B[1][0]: 3
B[1][1]: 4
Add two matrix (A + B):
2   4
6   8
```

7.Check whether a number is even or odd

```
#include<stdio.h>
void main()
{
    int n;
    printf("\n Enter any number:--");
    scanf("%d",&n);
     if(n%2==0)
     {
         printf("\n Number is even");
     }

      else

     {
         printf("\n Number is odd");
     }
}
```

Output

```
Enter any number:--12

Number is even
```

8.concatenate two string

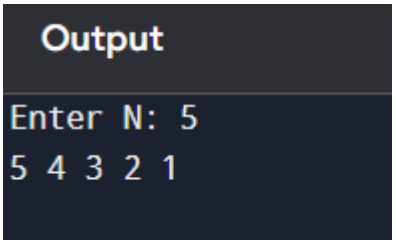
```
#include<stdio.h>
int main() {
    char str1[100], str2[100];
    int i = 0, j = 0;

    printf("Enter first string: ");
     fgets(str1, sizeof(str1), stdin);

    printf("Enter second string: ");
     fgets(str2, sizeof(str2), stdin);



    while (str1[i] != '\0')
    {
        i++;
    }
    while (str2[j] != '\0') {
        str1[i] = str2[j];
        i++;
        j++;
    }
    str1[i] = '\0';
    printf("Concatenated string: %s\n", str1);

    return 0;
}
```

Output

```
Enter first string: pranshu
Enter second string: patel
Concatenated string: pranshu
patel
```

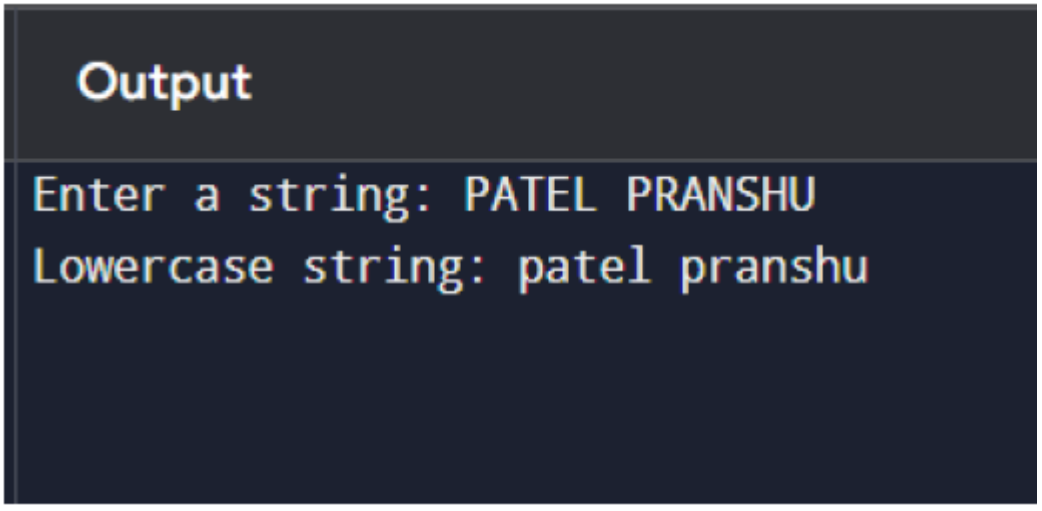
9. Print the first N natural numbers in reverse

```
#include<stdio.h>
int main()
 {
    int N;
    printf("Enter N: ");
    scanf("%d", &N);

    for (int i = N; i >= 1; i--)
        printf("%d ", i);

    return 0;
}
```



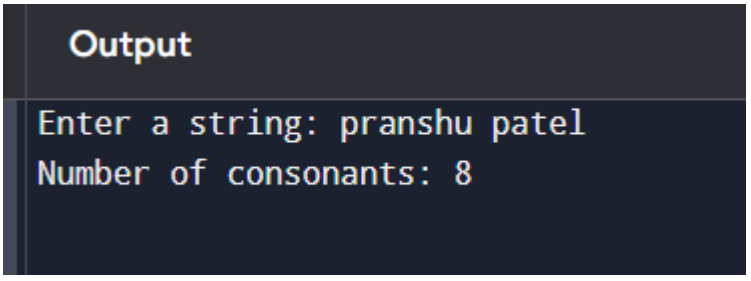
10. Convert a string to lowercase

```
#include <stdio.h>
#include <ctype.h>
int main()
{
char str[100];
printf("Enter a string: ");
fgets(str, sizeof(str), stdin);
for (int i = 0; str[i] != '\0'; i++) {
str[i] = tolower(str[i]);
}
printf("Lowercase string: %s\n", str);
return 0;
}
```



11. Count consonants in a string

```
#include<stdio.h>
#include<ctype.h>
int main()
{
   char str[50];
   int count = 0;

   printf("Enter a string: ");
   fgets(str, sizeof(str), stdin);


   for (int i = 0; str[i] != '\0'; i++)
   {
      char ch = tolower(str[i]);
      if ((ch >= 'a' && ch <= 'z') && !(ch == 'a'|| ch == 'e'|| ch == 'i'|| ch == 'o'|| ch == 'u'))
         count++;
   }

   printf("Number of consonants: %d\n", count);
   return 0;
}
```



12.Convert kilometers to miles

```
#include<stdio.h>
int main()
 {
    float km, miles;
    printf("Enter distance in kilometers: ");
    scanf("%f", &km);

    miles = km * 0.621371;

    printf("%.2f km = %.2f miles\n", km, miles);
    return 0;
}
```

Output

```
Enter distance in kilometers: 10
10.00 km = 6.21 miles
```

13. Subtract two matrix

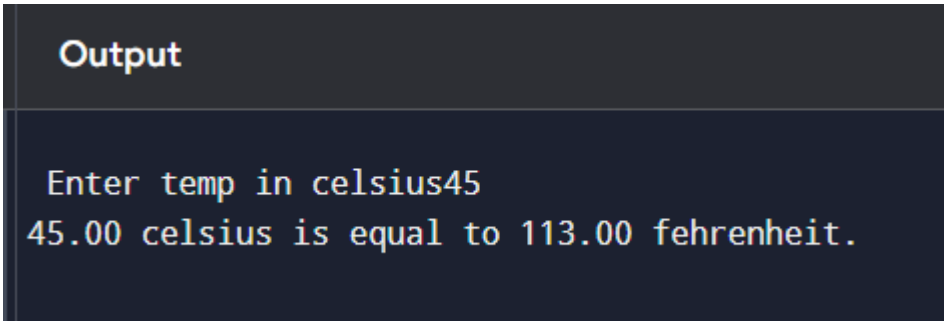
```
#include<stdio.h>
int main()
 {
    int m, n, i, j;
    printf("Enter the number of rows and columns of the matrix: ");
    scanf("%d %d", &m, &n);

    int A[m][n], B[m][n], C[m][n];
    printf("Enter elements of first matrix (A):\n");
    for(i = 0; i < m; i++) {
        for(j = 0; j < n; j++) {
            printf("A[%d][%d]: ", i, j);
            scanf("%d", &A[i][j]);
        }
    }
    printf("Enter elements of second matrix (B):\n");
    for(i = 0; i < m; i++) {
        for(j = 0; j < n; j++) {
            printf("B[%d][%d]: ", i, j);
            scanf("%d", &B[i][j]);
        }
    }
    for(i = 0; i < m; i++) {
        for(j = 0; j < n; j++) {
            C[i][j] = A[i][j] - B[i][j];
        }
    }
    printf("substract matrix (A - B):\n");
    for(i = 0; i < m; i++) {
        for(j = 0; j < n; j++) {
            printf("%d\t", C[i][j]);
        }
        printf("\n");
    }
    return 0;
}
```

Output

```
Enter the number of rows and columns of the matrix: 2
2
Enter elements of first matrix (A):
A[0][0]: 1
A[0][1]: 2
A[1][0]: 3
A[1][1]: 4
Enter elements of second matrix (B):
B[0][0]: 5
B[0][1]: 6
B[1][0]: 7
B[1][1]: 8
substract matrix (A - B):
-4  -4
-4  -4
```

14. Convert Celsius to fahrenheit

```
#include<stdio.h>
void main()
{
   float celsius, fehrenheit;
    printf("\n Enter temp in celsius");
    scanf("%f",&celsius);

    fehrenheit=(celsius*9.0/5.0)+32;

    printf("%.2f celsius is equal to %.2f fehrenheit.\n",celsius,fehrenheit);

}
```



15. Compute the LCM of two numbers

```
#include<stdio.h>
int main()
 {
    int a, b, max;
    printf("Enter two numbers: ");
    scanf("%d %d", &a, &b);

    max = (a > b) ? a : b;

    while (1) {
        if (max % a == 0 && max % b == 0) {
            printf("LCM = %d\n", max);
            break;
        }
        max++;
    }

    return 0;
}
```

Output

```
Enter two numbers: 34
12
LCM = 204
```