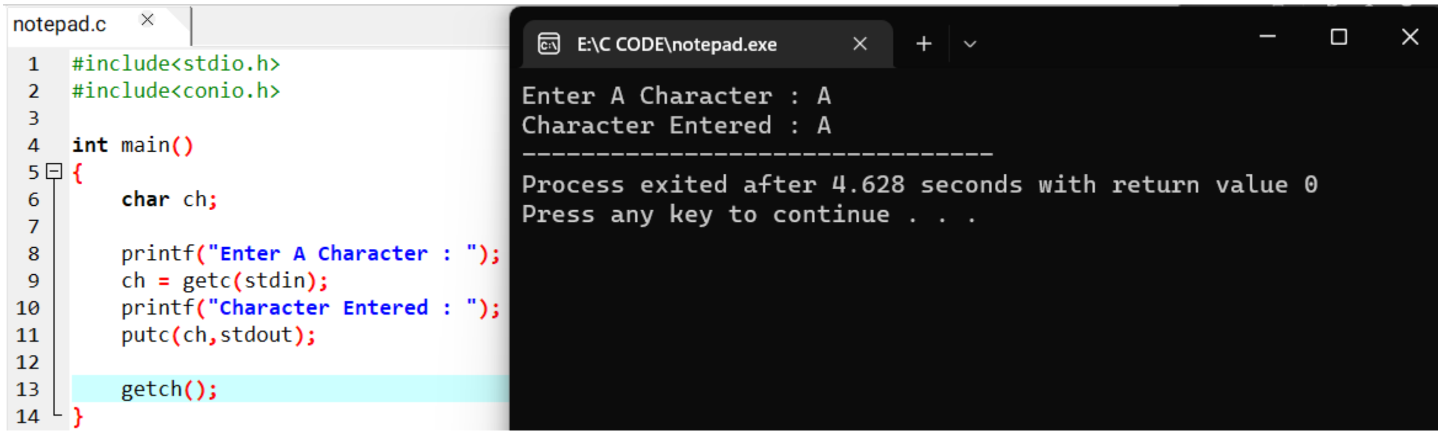
Unformatted Input Function In C Programming:

getc() function: int getc(FILE *stream)

this function gets the next character an unsigned char from the specified stream and advances the position indicator for the stream. The “stream” is the pointer to a FILE object that identifies the stream on which the operation is to be performed. It returns the character read as an unsigned char cast to an int or End Of File(EOF) or error.

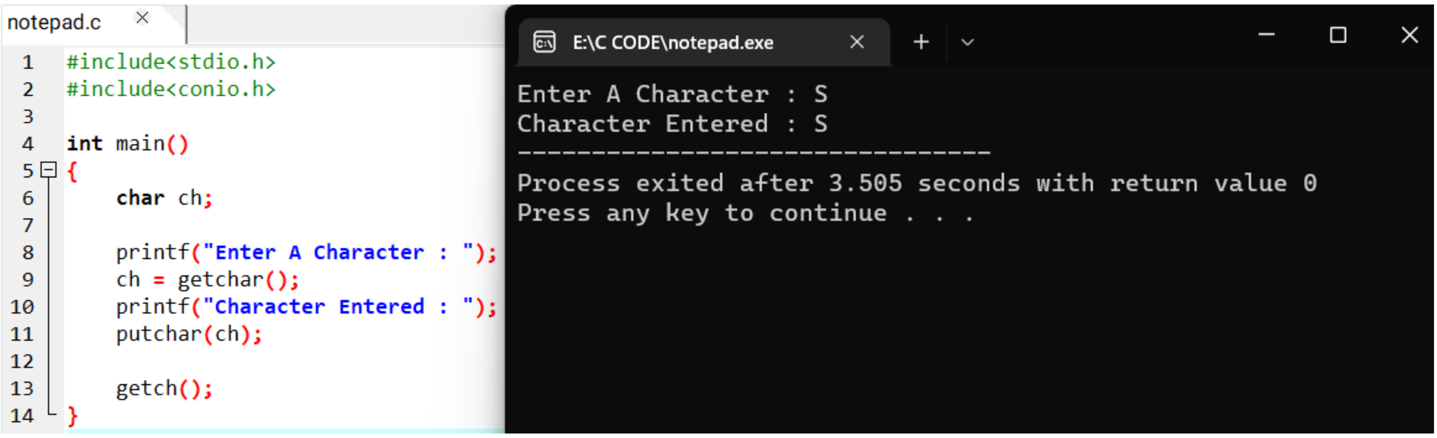


```c
#include<stdio.h>
#include<conio.h>

int main()
{
    char ch;

    printf("Enter A Character : ");
    ch = getc(stdin);
    printf("Character Entered : ");
    putc(ch,stdout);

    getch();
}
```

```
Enter A Character : A
Character Entered : A
--------------------------------
Process exited after 4.628 seconds with return value 0
Press any key to continue . . .
```

getchar() function:

A getchar() function is a non-standard function whose meaning is already defined in the stdin.h header file to accept a single input from the user. In other words, it is the C library function that gets a single character (unsigned char) from the stdin. However, the getchar() function is similar to the getc() function, but there is a small difference between the getchar() and getc() function of the C programming language. A getchar() reads a single character from standard input, while a getc() reads a single character from any input stream.

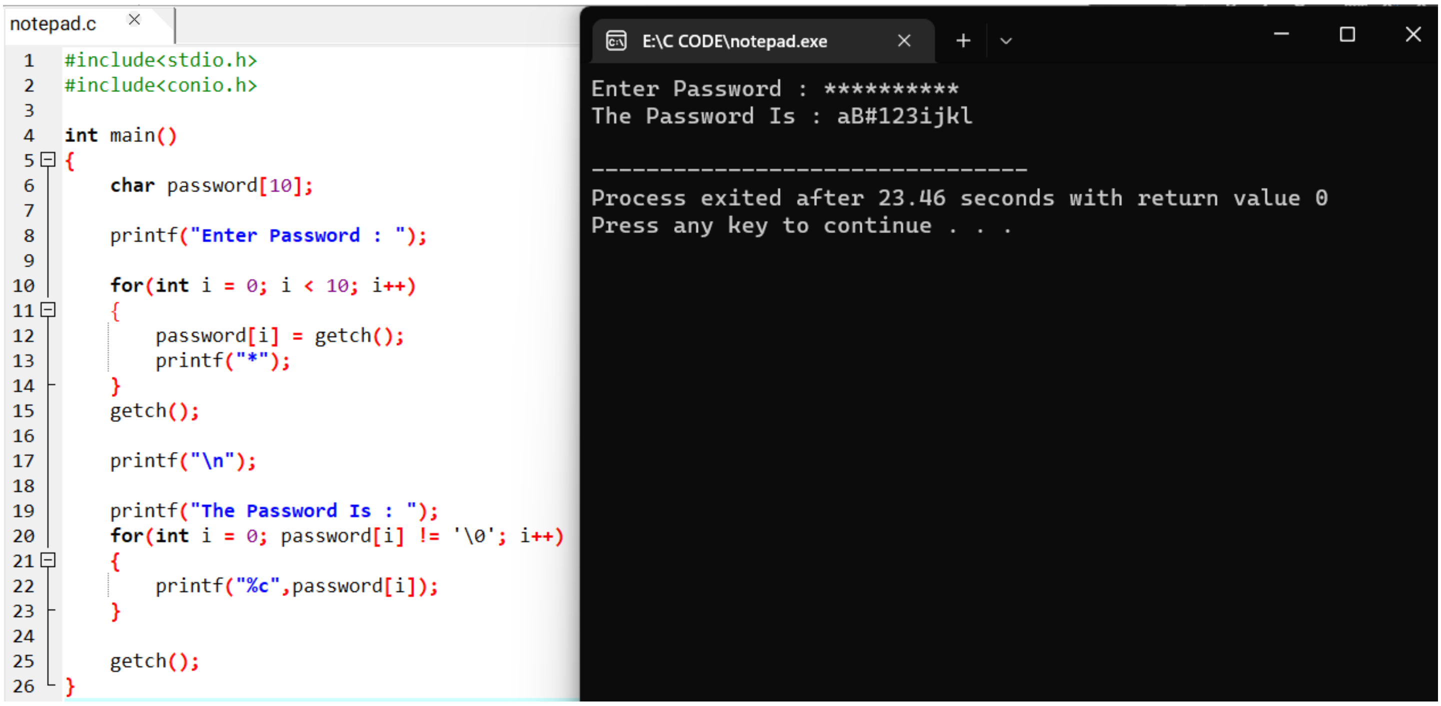


```c
#include<stdio.h>
#include<conio.h>

int main()
{
    char ch;

    printf("Enter A Character : ");
    ch = getchar();
    printf("Character Entered : ");
    putchar(ch);

    getch();
}
```

```
Enter A Character : S
Character Entered : S
--------------------------------
Process exited after 3.505 seconds with return value 0
Press any key to continue . . .
```

getch() function:

The getch() is a predefined non-standard function that is defined in conio.h header file. We use a getch() function in a C/ C++ program to hold the output screen for some time until the user passes a key from the keyboard to exit the console screen. Using getch() function, we can hide the input character provided by the users in the ATM PIN, password, etc.

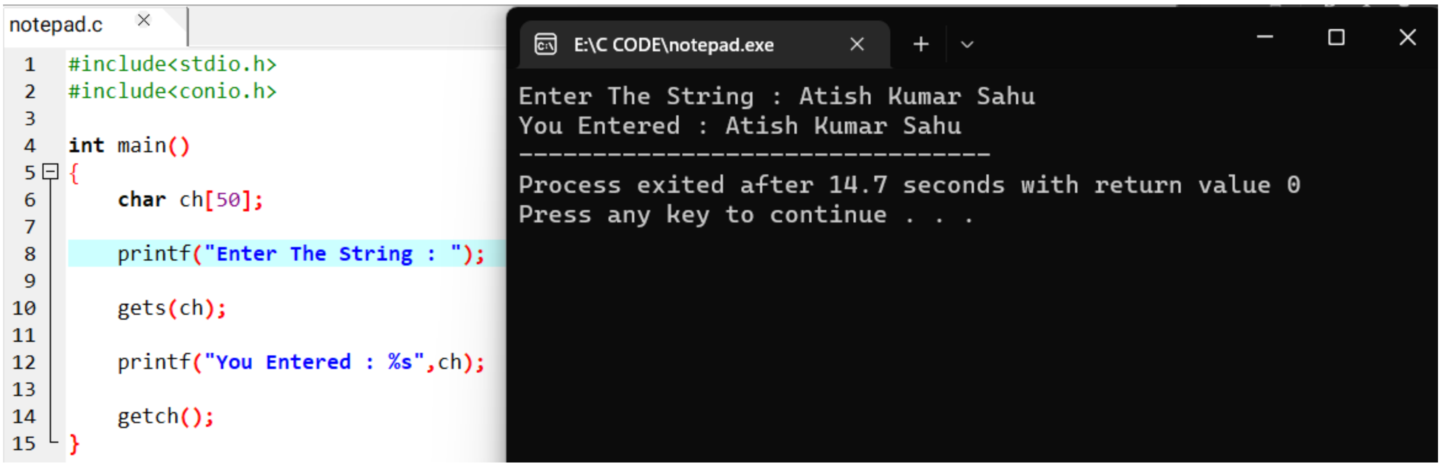


```c
#include<stdio.h>
#include<conio.h>

int main()
{
    char password[10];

    printf("Enter Password : ");

    for(int i = 0; i < 10; i++)
    {
        password[i] = getch();
        printf("*");
    }
    getch();

    printf("\n");

    printf("The Password Is : ");
    for(int i = 0; password[i] != '\0'; i++)
    {
        printf("%c",password[i]);
    }

    getch();
}
```

```
Enter Password : **********
The Password Is : aB#123ijkl

--------------------------------
Process exited after 23.46 seconds with return value 0
Press any key to continue . . .
```

gets() function:

The gets() function enables the user to enter some characters followed by the enter key. All the characters entered by the user get stored in a character array. The null character is added to the array to make it a string. The gets() allows the user to enter the space-separated strings. It returns the string entered by the user.

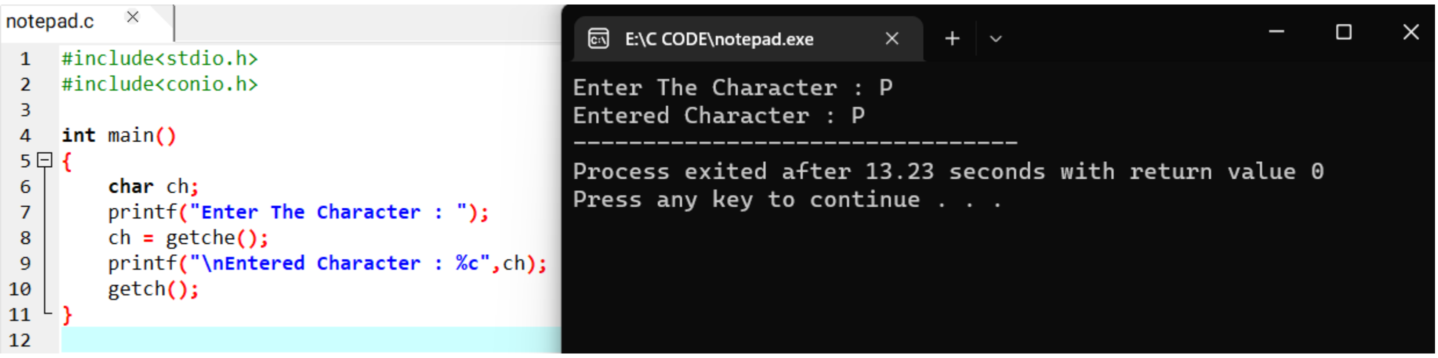


```c
#include<stdio.h>
#include<conio.h>

int main()
{
    char ch[50];

    printf("Enter The String : ");

    gets(ch);

    printf("You Entered : %s",ch);

    getch();
}
```

```
Enter The String : Atish Kumar Sahu
You Entered : Atish Kumar Sahu
--------------------------------
Process exited after 14.7 seconds with return value 0
Press any key to continue . . .
```

getche() function:

getche() function is also a non-standard function and declared in “conio.h” header file. it reads a single character from the keyboard and returns it immediately without even waiting for enter key.



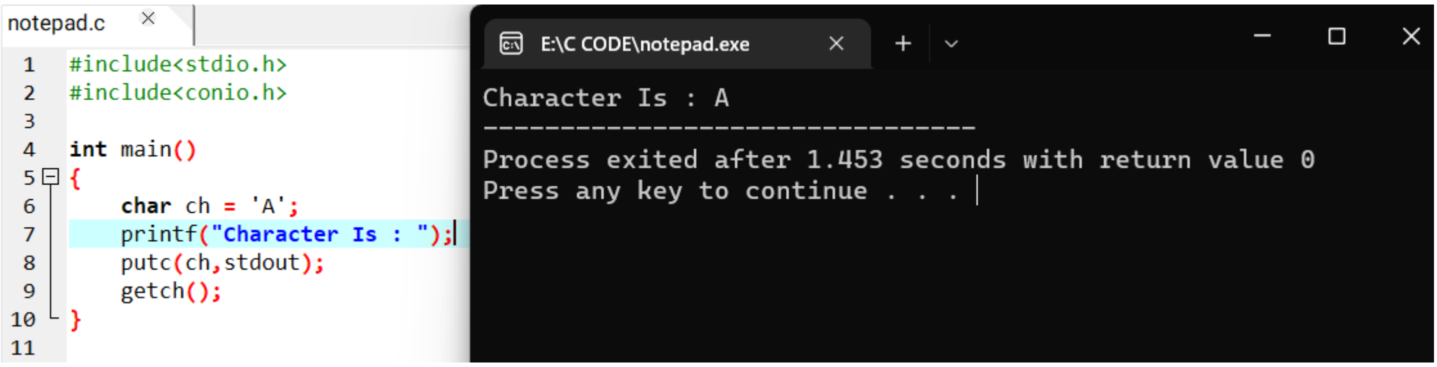
```c
#include<stdio.h>
#include<conio.h>

int main()
{
    char ch;
    printf("Enter The Character : ");
    ch = getche();
    printf("\nEntered Character : %c",ch);
    getch();
}
```

```
Enter The Character : P
Entered Character : P
--------------------------------
Process exited after 13.23 seconds with return value 0
Press any key to continue . . .
```

53. Unformatted Output Function In C Programming:

putc() function: putc(int char, FILE *stream)

This library function writes a character (an unsigned char) specified by the argument char to the specified and advances the position indicator for the stream. “char” is the character to be written. The character is passed as its int promotion. “stream” is the pointer to a FILE object that identifies the stream where the character is to be written. This function returns the character written as an unsigned char cast to an int or End Of File(EOF) on error.

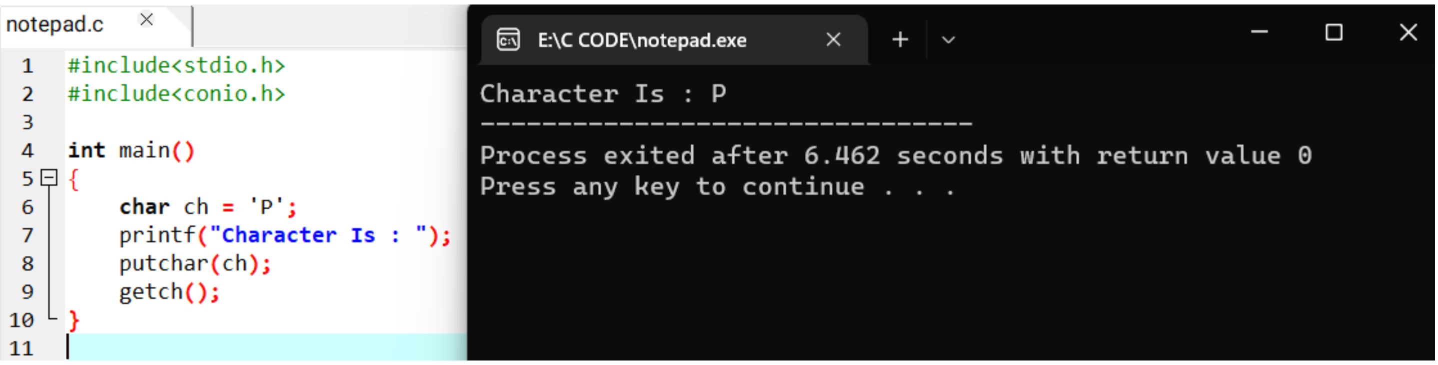


```c
#include<stdio.h>
#include<conio.h>

int main()
{
    char ch = 'A';
    printf("Character Is : ");
    putc(ch,stdout);
    getch();
}
```

```
Character Is : A
--------------------------------
Process exited after 1.453 seconds with return value 0
Press any key to continue . . .
```

putchar() function: int putchar(int char)

This method in C programming is used to write a character of unsigned char type, to stdout. This character is passed as the parameter to this method. This method accepts a mandatory parameter char which is the character to be written to stdout. This function returns the character written on the stdout as an unsigned char. It also returns End Of File(EOF) when some error occurs.

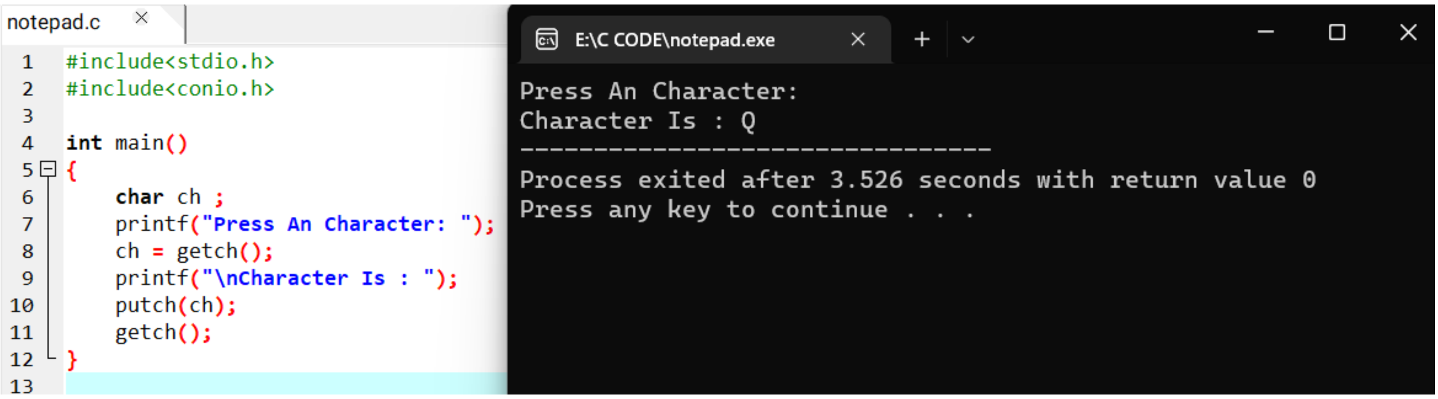


```c
#include<stdio.h>
#include<conio.h>

int main()
{
    char ch = 'P';
    printf("Character Is : ");
    putchar(ch);
    getch();
}
```

```
Character Is : P
--------------------------------
Process exited after 6.462 seconds with return value 0
Press any key to continue . . .
```

putch() function:

This function is used for printing character to a screen at current cursor location. It is unformatted character output functions. It is defined in header file “conio.h”.

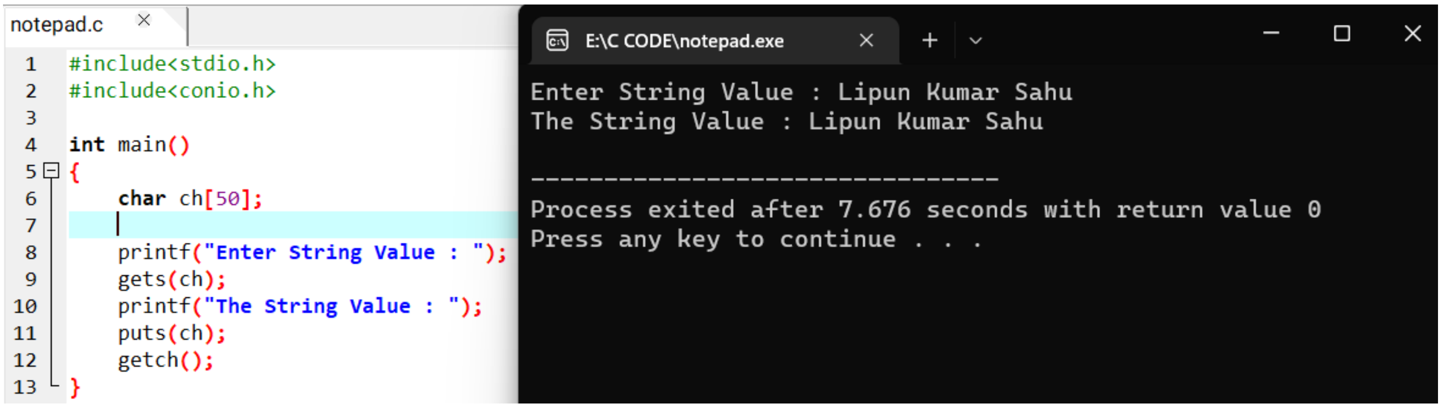


```c
#include<stdio.h>
#include<conio.h>

int main()
{
    char ch ;
    printf("Press An Character: ");
    ch = getch();
    printf("\nCharacter Is : ");
    putch(ch);
    getch();
}
```

```
Press An Character:
Character Is : Q
--------------------------------
Process exited after 3.526 seconds with return value 0
Press any key to continue . . .
```

puts() function:

The puts() function is very much similar to printf() function. The puts() function is used to print the string on the console which is previously read by using gets() or scanf() function. The puts() function returns an integer value representing the number of characters being printed on the console.



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

int main()
{
    char ch[50];

    printf("Enter String Value : ");
    gets(ch);
    printf("The String Value : ");
    puts(ch);
    getch();
}
```

```
Enter String Value : Lipun Kumar Sahu
The String Value : Lipun Kumar Sahu

--------------------------------
Process exited after 7.676 seconds with return value 0
Press any key to continue . . .
```