CTSD PRACTICAL 2023 BATCH

PRACTICAL: 1 = Installation C IDE, Basic Structure of C program.Format Specifiers, Escape Character. Run time input/Output Programs.

Installation C IDE:

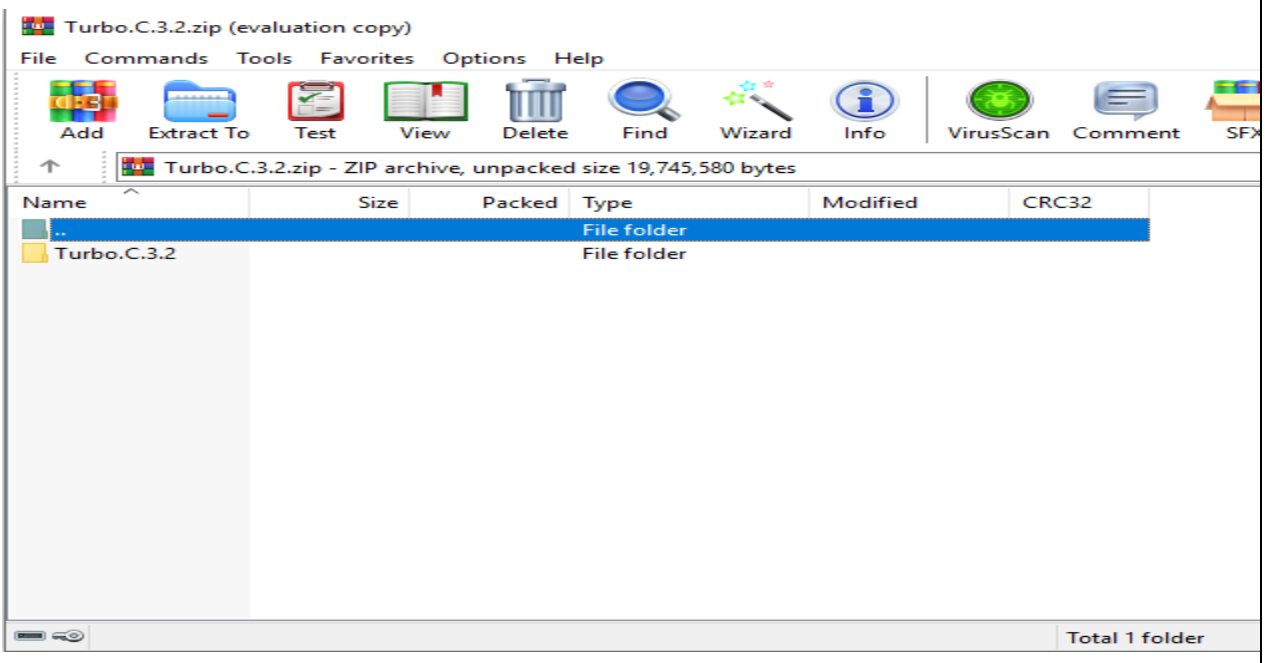
Installing Turbo C/C++ for Windows 7/8/10
Let's see how we can install Turbo C for writing C programs.

Step 1. Start by downloading the IDE installer

You can download the Zip file from this link: Download Turbo C

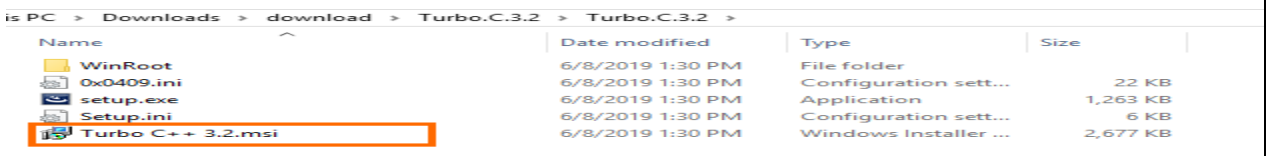
Step 2. Unzip the file to see the Installer file

Next use WinRar or any other software to see what is there in the zip file you downloaded.

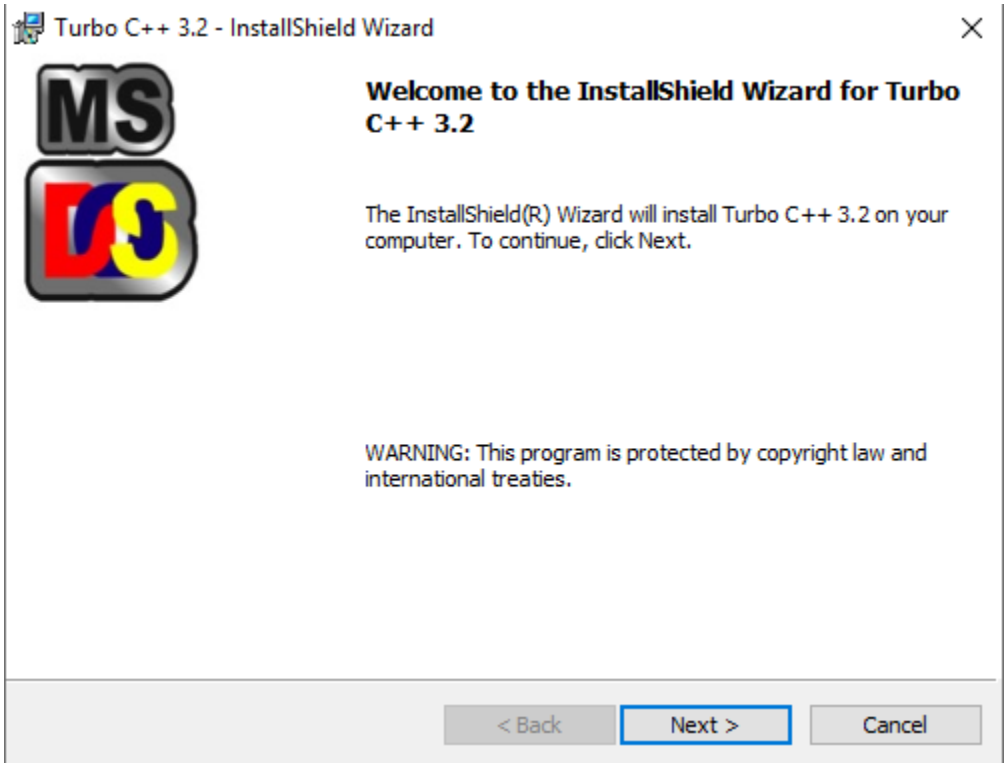


Step 3. Start the Installation

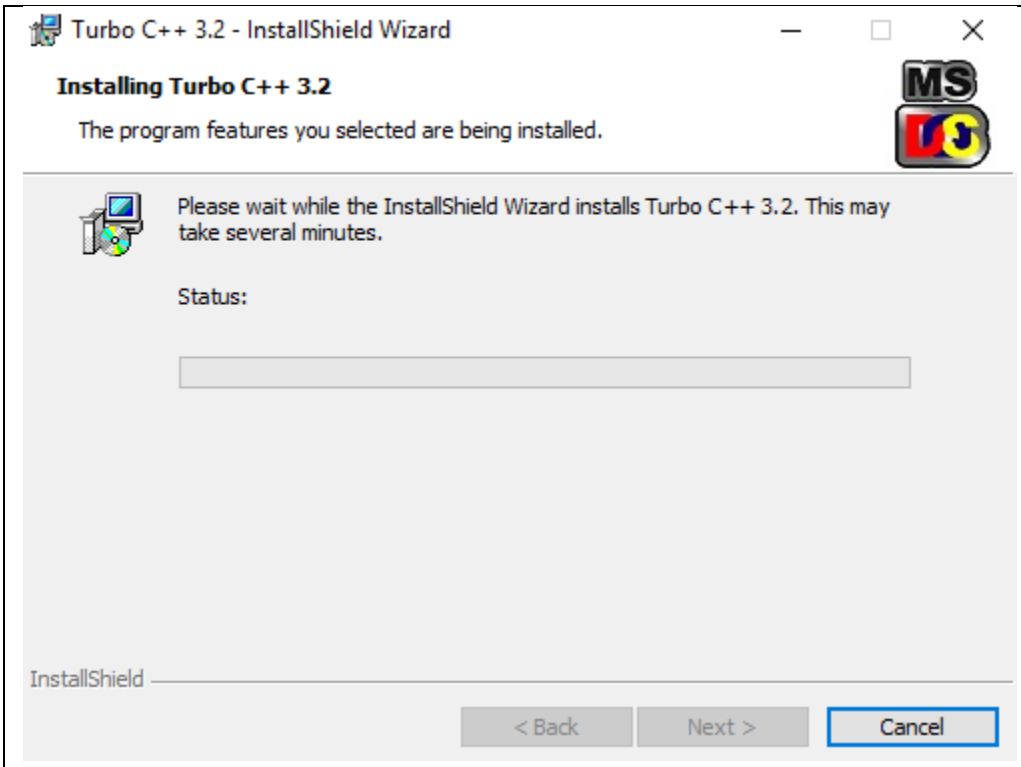
If you are a Windows OS user, click on the **.msi** file for starting the installation.



You will see the InstallShield Wizard for Turbo C/C++, click on the **Next** button.



And the installation should start. Now sit back and wait for the installation to get complete.



BASIC STRUCTURE OF C PROGRAM:

Structure of the C Program
There are 6 basic sections responsible for the proper execution of a program. Sections are mentioned below:

1. Documentation
2. Preprocessor Section
3. Definition
4. Global Declaration
5. Main() Function
6. Sub Programs

FORMAT SPECIFIER IN C PROGRAM:

Format Specifier	Description
%c	For character type.
%d	For signed integer type.

%e or %E	For scientific notation of floats.
%f	For float type.
%g or %G	For float type with the current precision.
%i	Unsigned integer
%ld or %li	Long
%lf	Double
%Lf	Long double
%lu	Unsigned int or unsigned long
%lli or %lld	Long long
%llu	Unsigned long long
%o	Octal representation
%p	Pointer
%s	String
%u	Unsigned int
%x or %X	Hexadecimal representation
%n	Prints nothing
%%	Prints % character

ESCAP CHARACTER IN C PROGRAM:

Escape Sequence	Name	Description
\a	Alarm or Beep	It is used to generate a bell sound in the C program.
\b	Backspace	It is used to move the cursor one place backward.
\f	Form Feed	It is used to move the cursor to the start of the next logical page.
\n	New Line	It moves the cursor to the start of the next line.
\r	Carriage Return	It moves the cursor to the start of the current line.
\t	Horizontal Tab	It inserts some whitespace to the left of the cursor and moves the cursor accordingly.
\v	Vertical Tab	It is used to insert vertical space.
\\	Backlash	Use to insert backslash character.
\’	Single Quote	It is used to display a single quotation mark.
\”	Double Quote	It is used to display double quotation marks.
\?	Question Mark	It is used to display a question mark.
\ooo	Octal Number	It is used to represent an octal number.

	Number	
\0	NULL	It represents the NULL character.

RUN TIME INPUT OUTPUT PROGRAM:

```
#include <stdio.h>

int main()

{ int num;

    char ch;

    float f;

printf("Enter the integer: ");

scanf("%d", &num);

 printf("\nEntered integer is: %d", num);

while((getchar()) != '\n');

printf("\n\nEnter the float: ");

scanf("%f", &f);

 printf("\nEntered float is: %f", f);

 printf("\n\nEnter the Character: ");

    scanf("%c", &ch);
```

```
 printf("\nEntered character is: %c", ch);

return 0;}
```

Output:

Enter the integer: 10

Entered integer is: 10

Enter the float: 2.5

Entered float is: 2.500000

Enter the Character: A

Entered Character is: A