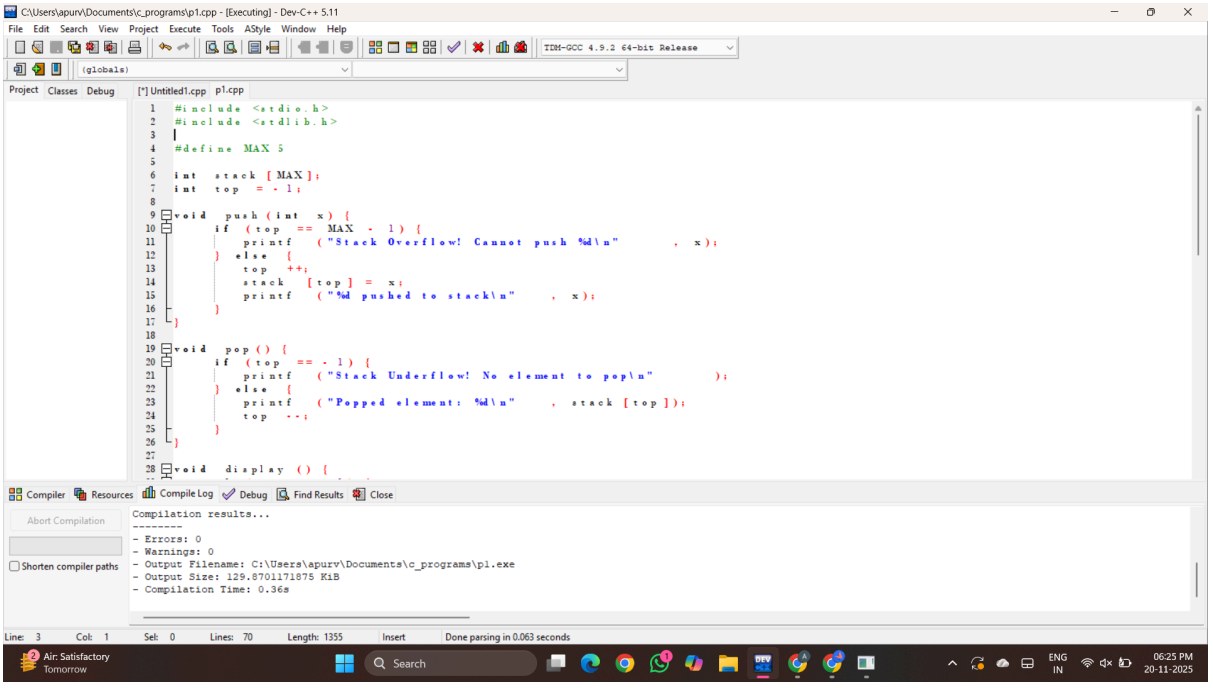
1.Write a program to simulate the working of stack using an array with the following :

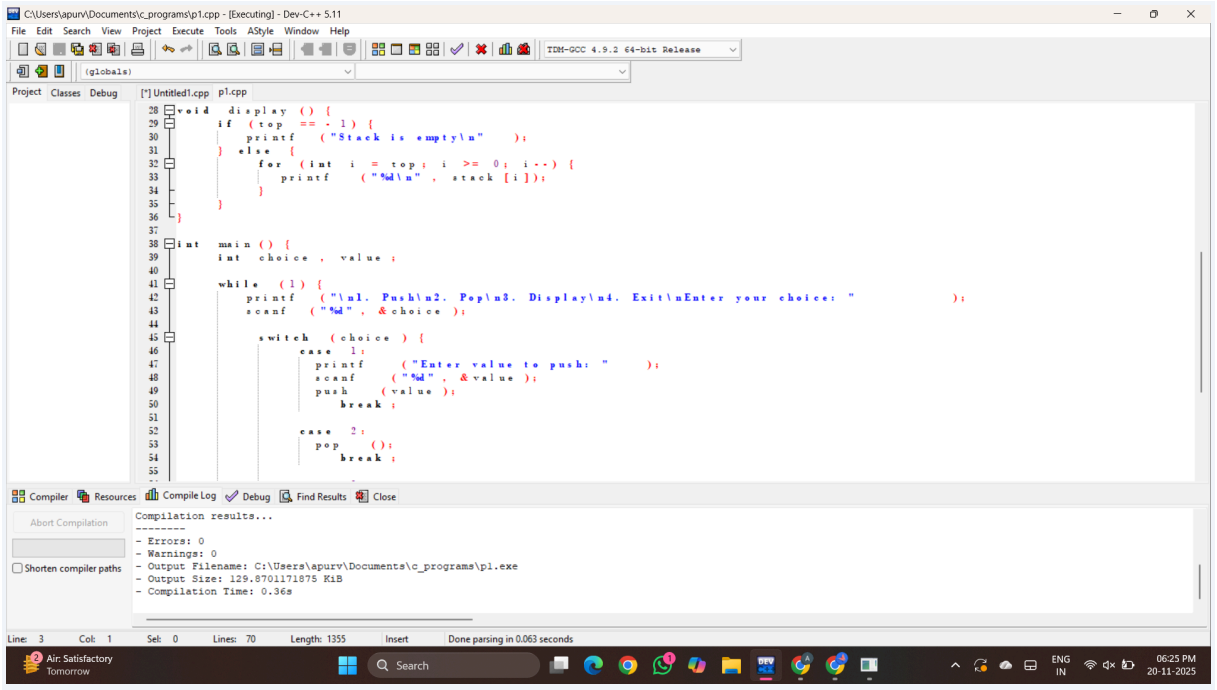
a) Push

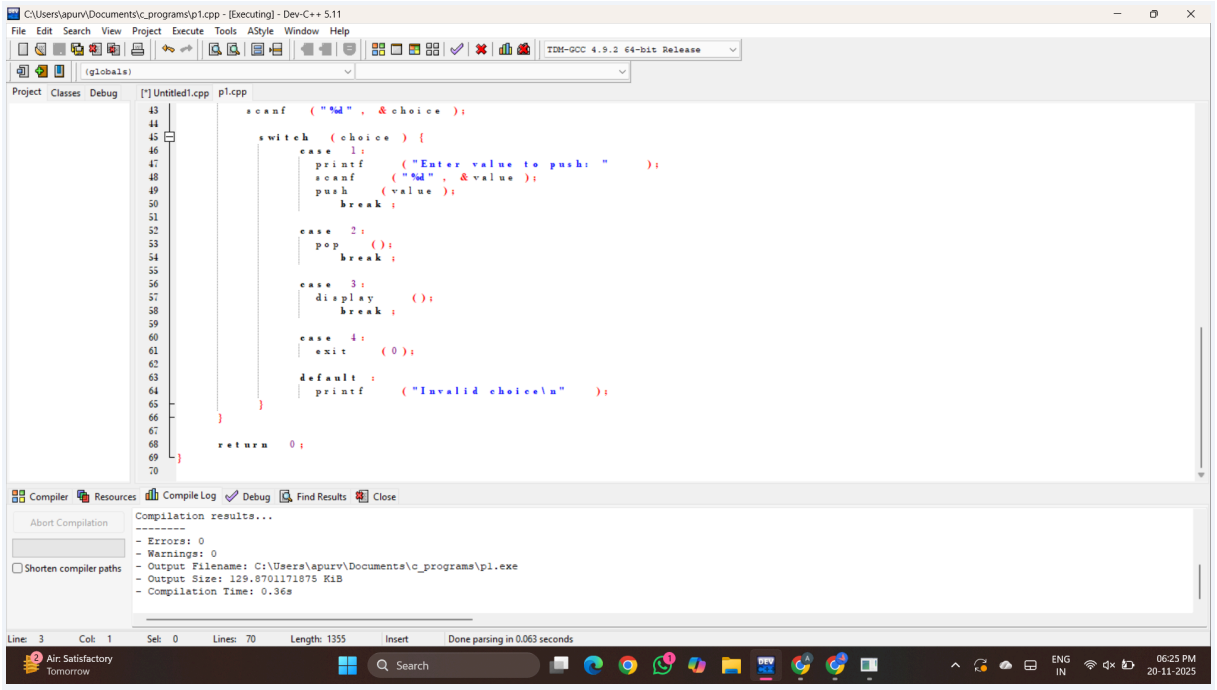
b) Pop

c) Display

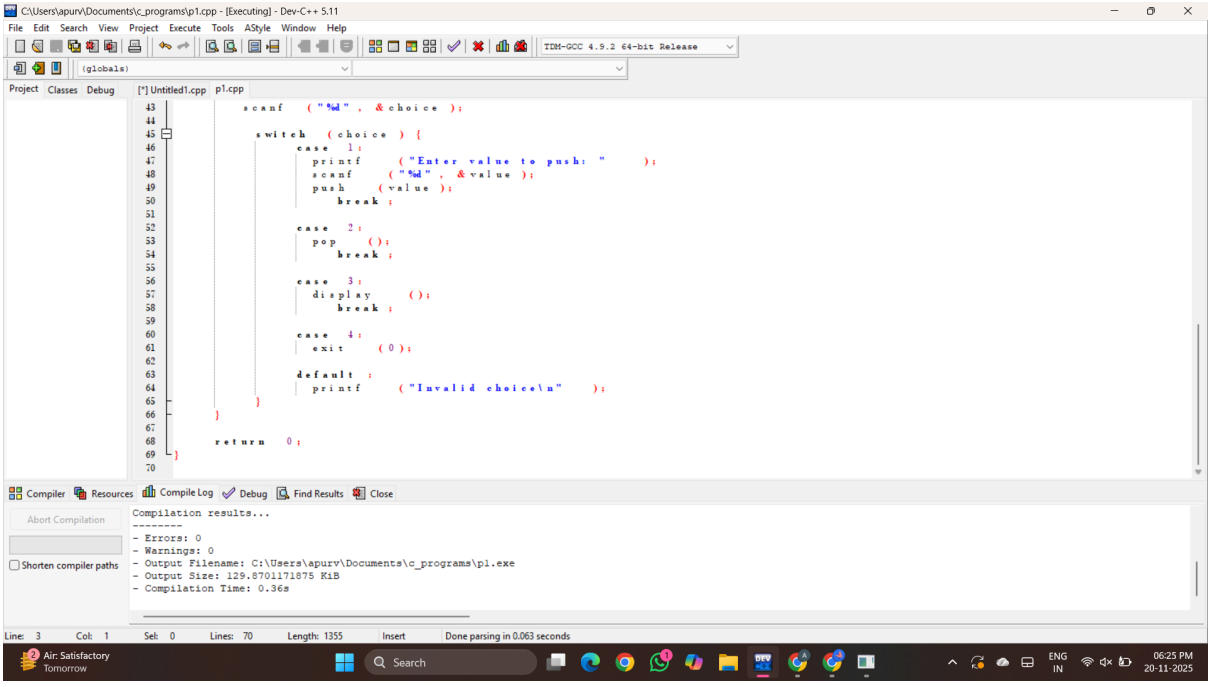
The program should print appropriate messages for stack overflow, stack underflow






C:\Users\apurv\Documents\c_programs\p1.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Release
(globals)
Project Classes Debug
[*] Untitled1.cpp
p1.cpp
scanf ("%d", &choice);
switch (choice) {
case 1:
printf ("Enter value to push: ");
scanf ("%d", &value);
push (value);
break;
case 2:
pop ();
break;
case 3:
display ();
break;
case 4:
exit (0);
default:
printf ("Invalid choice\n");
}
}
return 0;
}
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\apurv\Documents\c_programs\p1.exe
- Output Size: 129.8701171875 KiB
- Compilation Time: 0.36s
Line: 3 Col: 1 Sel: 0 Lines: 70 Length: 1355 Insert Done parsing in 0.063 seconds
Air: Satisfactory
Tomorrow
Search
ENG
IN
06:25 PM
20-11-2025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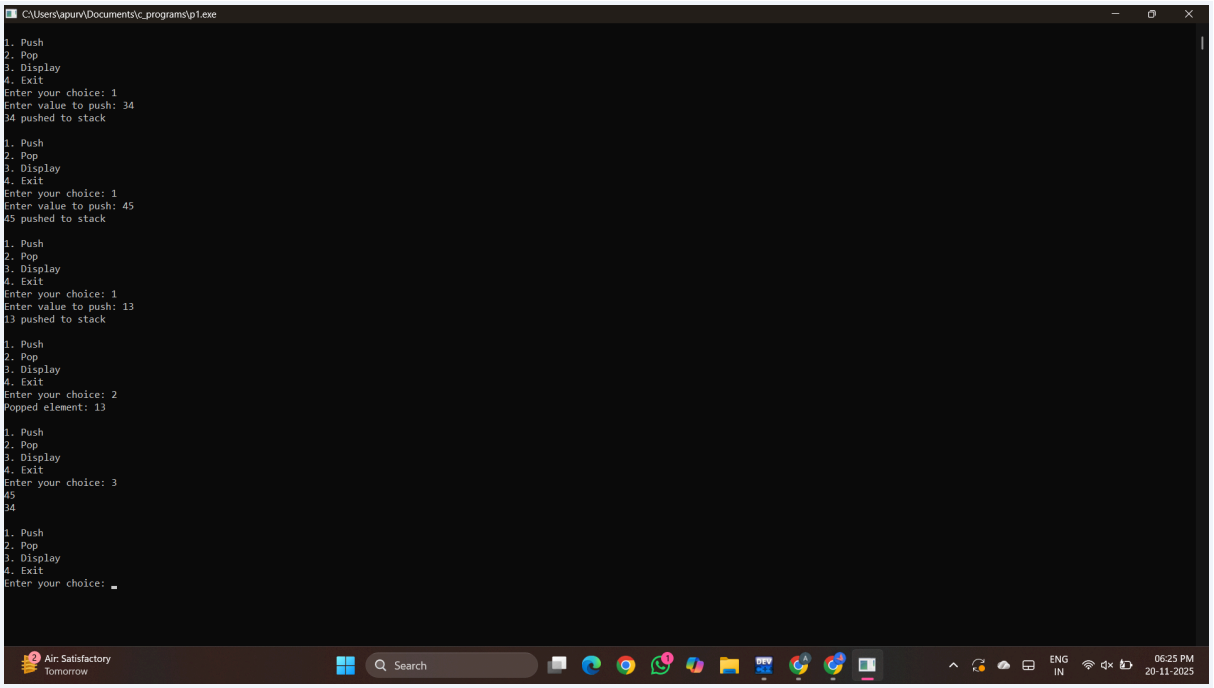
C:\Users\apurv\Documents\c_programs\p1.exe
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 1
Enter value to push: 34
34 pushed to stack
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 1
Enter value to push: 45
45 pushed to stack
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 1
Enter value to push: 13
13 pushed to stack
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 2
Popped element: 13
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 3
45
34
1. Push
2. Pop
3. Display
4. Exit
Enter your choice:
Air: Satisfactory
Tomorrow
Search
ENG
IN
06:25 PM
20-11-2025