

Anton DeCesare mod 2.2

```
1 '''
2 Anton DeCesare mod 1.3
3 This program takes an input of number of beers and counts them off the wall!
4 ...
5 ...
6 ...
7 ...
8 # Function to handle number of beers and counts down
9 def countdown(number_of_beers):
10     # Beers gone, loop over
11     if number_of_beers == 0:
12         print("No more bottles of beer on the wall, no more bottles of beer.")
13         print("Go to the store and buy some more, 99 bottles of beer on the wall.")
14     else:
15         # Print beer singular
16         if number_of_beers == 1:
17             print(f"{number_of_beers} bottle of beer on the wall, {number_of_beers} bottle of beer.")
18             print("Take one down and pass it around, no more bottles of beer on the wall.\n")
19         else:
20             # Print number of beers
21             print(f"{number_of_beers} bottles of beer on the wall, {number_of_beers} bottles of beer.")
22             print(f"Take one down and pass it around, {number_of_beers - 1} bottles of beer on the wall.\n")
23             # Recursively count down number of beers
24             countdown(number_of_beers - 1)
25
26 def main():
27     # Initiate number of beers to start at
28     number_of_beers = int(input("Enter the number of beers: "))
29     if number_of_beers <= 0:
30         print("Invalid input. Please enter a positive integer.")
31         return
32     print("Starting the song with", number_of_beers, "bottles of beer on the wall...\n")
33     countdown(number_of_beers)
34
35 if __name__ == '__main__':
36     main()
37 '''
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3 This program takes an input of number of beers and counts them off the wall!
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19         else:
20             # Print number of beers
21             print(f"{number_of_beers} bottles of beer on the wall, {number_of_beers} bottles of beer.")
22             print(f"Take one down and pass it around, {number_of_beers - 1} bottles of beer on the wall.\n")
23             # Recursively count down number of beers
24             countdown(number_of_beers - 1)
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26 def main():
27     # Initiate number of beers to start at
28     number_of_beers = int(input("Enter the number of beers: "))
29     if number_of_beers <= 0:
30         print("Invalid input. Please enter a positive integer.")
31         return
32     print("Starting the song with", number_of_beers, "bottles of beer on the wall...\n")
33     countdown(number_of_beers)
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35 if __name__ == '__main__':
36     main()
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The screenshot shows a Python IDE with a dark theme. The main editor displays a file named `mod1.3.py` containing a recursive function `countdown` and a `main` function. The `countdown` function is designed to print the number of bottles of beer on the wall and then recursively call itself with a decremented value. The `main` function prompts the user for a starting number and calls `countdown`. The IDE's left sidebar shows the `VARIABLES` pane with `number_of_beers = 99` in the `Locals` section. The `CALL STACK` pane shows the current execution frame for `main` in `mod1.3.py` at line 30, which is highlighted. The bottom status bar indicates the current directory and the active Python environment.

```
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7
8 # Function to handle number of beers and counts down
9 def countdown(number_of_beers):
10     # Beers gone, loop over
11     if number_of_beers == 0:
12         print("No more bottles of beer on the wall, no more bottles of beer.")
13         print("Go to the store and buy some more, 99 bottles of beer on the wall.")
14     else:
15         # Print beer singular
16         if number_of_beers == 1:
17             print("{} bottle of beer on the wall, {} bottle of beer.".format(number_of_beers, number_of_beers))
18             print("Take one down and pass it around, no more bottles of beer on the wall.\n")
19         else:
20             # Print number of beers
21             print("{} bottles of beer on the wall, {} bottles of beer.".format(number_of_beers, number_of_beers))
22             print("Take one down and pass it around, {} bottles of beer on the wall.\n".format(number_of_beers - 1))
23             # Recursively count down number of beers
24             countdown(number_of_beers - 1)
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28 def main():
29     # Initiate number of beers to start at
30     number_of_beers = int(input("Enter the number of beers: "))
31     if number_of_beers <= 0:
32         print("Invalid input. Please enter a positive integer.")
33         return
34     print("Starting the song with", number_of_beers, "bottles of beer on the wall...\n")
35     countdown(number_of_beers)
36
37
38 if __name__ == "__main__":
39     main()
40
```

CALL STACK: main mod1.3.py 30

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS COMMENTS

csd-325 git: (main) cd /Users/antondecesare/Bellevue/AdvPython/csd/csd-325 ; /usr/bin/env /Users/antondecesare/.pyenv/versions/3.10.2/bin/python /Users/ant

Anton DeCesare mod 2.2

This screenshot shows the VS Code Python Debugger interface. The main editor displays the `mod1.3.py` file with the `countdown` function and `main` function. The left sidebar shows the **VARIABLES** pane with `number_of_beers = 99` in the Locals section. The **CALL STACK** pane shows the current frame `countdown mod1.3.py` at line 38. The **DEBUG CONSOLE** at the bottom shows the output: `Enter the number of beers: 99` and `Starting the song with 99 bottles of beer on the wall...`. The `countdown` function is currently paused at line 38, which is `if __name__ == "__main__":`.

```
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8 # Function to handle number of beers and counts down
9 def countdown(number_of_beers):
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22             print(f"Take one down and pass it around, {number_of_beers - 1} bottles of beer on the wall.\n")
23             # Recursively count down number of beers
24             countdown(number_of_beers - 1)
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26
27 def main():
28     # Initiate number of beers to start at
29     number_of_beers = int(input("Enter the number of beers: "))
30     if number_of_beers <= 0:
31         print("Invalid input. Please enter a positive integer.")
32         return
33
34     print("Starting the song with", number_of_beers, "bottles of beer on the wall...\n")
35     countdown(number_of_beers)
36
37
38 if __name__ == "__main__":
39     main()
40
```

This screenshot shows the VS Code Python Debugger interface after the next step. The `countdown` function is now paused at line 21, which is `print(f"{number_of_beers} bottles of beer on the wall, {number_of_beers} bottles of beer.")`. The **VARIABLES** pane remains the same. The **CALL STACK** pane shows the current frame `countdown mod1.3.py` at line 21. The **DEBUG CONSOLE** at the bottom shows the output: `Enter the number of beers: 99` and `Starting the song with 99 bottles of beer on the wall...`.

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8 # Function to handle number of beers and counts down
9 def countdown(number_of_beers):
10     # Beers gone, loop over 0
11     if number_of_beers == 0:
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16         if number_of_beers == 1:
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18             print("Take one down and pass it around, no more bottles of beer on the wall.\n")
19         else:
20             # Print number of beers
21             print(f"{number_of_beers} bottles of beer on the wall, {number_of_beers} bottles of beer.")
22             print(f"Take one down and pass it around, {number_of_beers - 1} bottles of beer on the wall.\n")
23             # Recursively count down number of beers
24             countdown(number_of_beers - 1)
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27 def main():
28     # Initiate number of beers to start at
29     number_of_beers = int(input("Enter the number of beers: "))
30     if number_of_beers <= 0:
31         print("Invalid input. Please enter a positive integer.")
32         return
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34     print("Starting the song with", number_of_beers, "bottles of beer on the wall...\n")
35     countdown(number_of_beers)
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38 if __name__ == "__main__":
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