

Tracing Through Code Solution

The following assumes user input of 5.0 followed by hi.

Line No.	x	y	z	m	n	p	output
2	5.0						x:
3	5.0	'hi'					y:
19	(5.0)	('hi')		8.0			
20	(5.0)	('hi')		8.0	4.0		
21	(5.0)	('hi')		8.0	4.0		
5	5.0	'hi'	4.0				
7	5.0	'hi'	4.0				
10	5.0	'hi'	4.0				
12	5.0	'hi'	4.0				
13	25.0	'hi'	4.0				
17	25.0	'hi'	4.0				x: 25.0, y: hi, z: 4.00

Some notes:

- If you prefer, you may start at line 1 followed by lines 19, 23, 29, 30, and then 2. Nothing interesting happens until line 2, so I start there.
- I also skip lines 4, 6, 9, and 16 as nothing happens (there is no code) on those lines.
- The code is on the next page (with line numbers this time) in case you lost/can't find it.

```
1 def main():
2     x = float(input("x: "))
3     y = input("y: ")
4
5     z = some_function(x + 3)
6
7     if z < 6.2 and y != "hi":
8         y = some_other_function(y)
9
10    if x > 8:
11        x -= 5
12    if x > 4:
13        x = x ** 2
14    else:
15        x = x / 3
16
17    print("x: {:.1f}, y: {:s}, z: {:.2f}".format(x, y, z))
18
19 def some_function(m):
20     n = m / 2
21     return n
22
23 def some_other_function(p):
24     if len(p) > 4:
25         return "long"
26     else:
27         return "short"
28
29 if __name__ == '__main__':
30     main()
```