

```
def address():  
    print('Addagutta')  
    print('Near JNTU college')  
    print('KPHB')  
    print('Kukatpally')  
    print('Hyderabad')  
    print('Telengana')  
    return None
```

```
def details():  
    print('venkat')  
    print('9390018934')  
    print('python')  
    print('venkat@gmail.com')  
    address()  
    return None
```

details()

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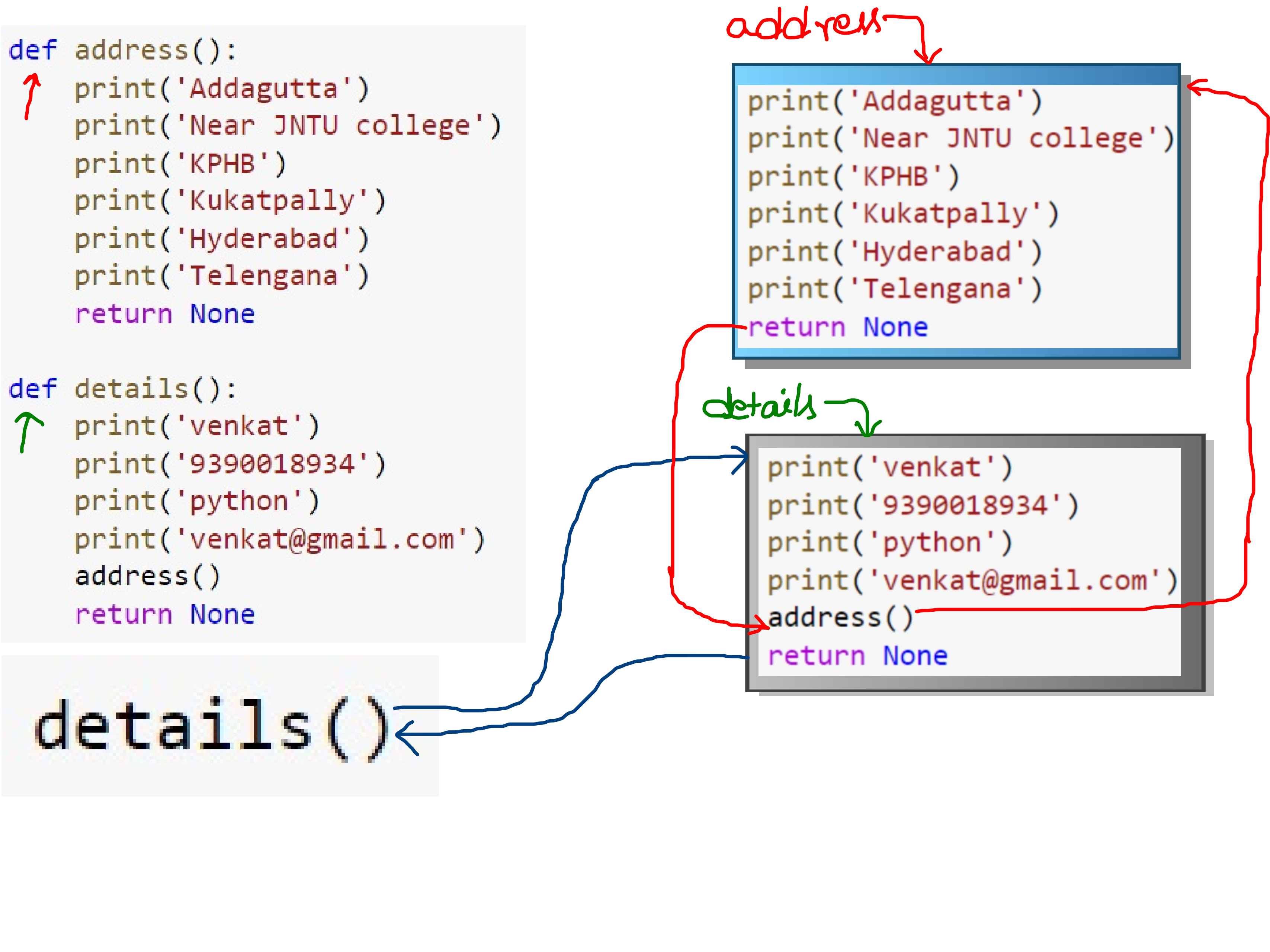
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```
def f1():  
    print('f1 function start')  
    x = 100  
    print(x)  
    print('f1 function end')  
    return None
```

```
def f2():  
    print('f2 function start')  
    y = 200  
    f1()  
    print(y)  
    print('f2 function end')  
    return None
```

```
f2()
```



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```

y → 200

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y → 200

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x → 100

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print(y)  
print('f2 function end')  
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y → 200



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x → 100

y → 200

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x → 100

y → 200

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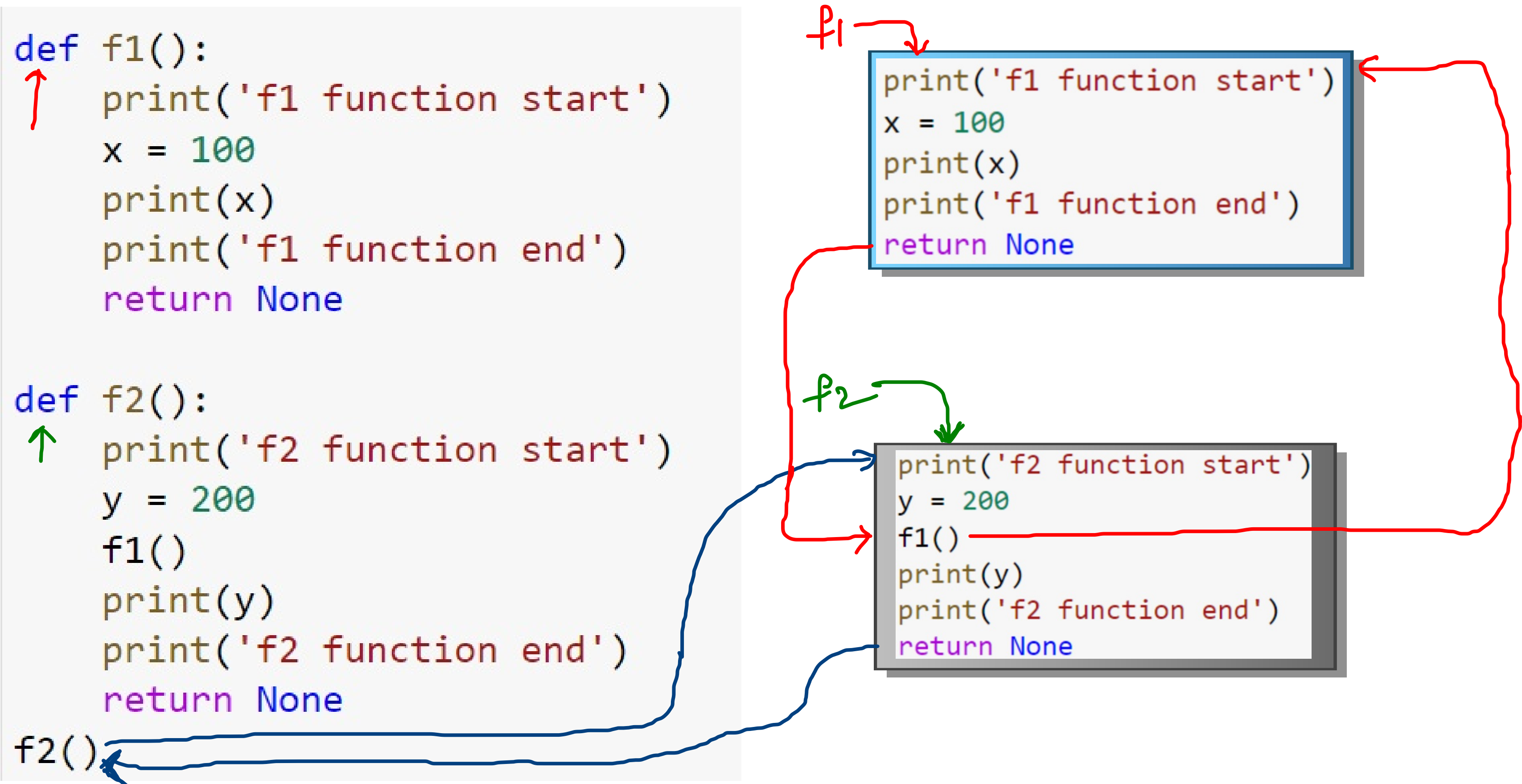
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```
def showname():  
    print('venkat')  
    showname()  
    return None
```

```
showname()
```



```
def showname():  
    print('venkat')  
    showname()  
    return None
```

```
showname()
```

showname

```
print('venkat')  
showname()  
return None
```

The diagram illustrates the execution of the recursive function `showname()`. A blue arrow originates from the `showname()` call in the bottom code block and points to the function's body in the top code block. A red arrow points from the `showname` variable to the function body. The function body contains a `print('venkat')` statement, a recursive call to `showname()`, and a `return None` statement.

```
def showname():  
    print('venkat')  
    showname()  
    return None
```

```
showname()
```

showname

```
print('venkat')  
showname()  
return None
```

The diagram illustrates the execution of the recursive function `showname()`. A blue arrow originates from the `showname()` call in the bottom code block and points to the function's definition in the top code block. A green line traces the return path: it starts at the `return None` statement, moves up to the `showname()` call, then continues up to the `print('venkat')` statement, and finally loops back to the `def showname():` line. A red arrow points from the `showname` label to the `showname()` call within the function's body.

shownumber(1)

```
def shownumber(i):  
    print(i,end=' ')  
    if i >= 5:  
        return None  
    shownumber(i+1)  
    return None
```

①

```
def shownumber(i):  
    print(i,end=' ')  
    if i >= 5:  
        return None  
    shownumber(i+1)  
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③

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def shownumber(i):  
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```

1 2 3 4 5

$[1, [2, [3, [4, [5, [6, [7, [8, [9, [10]]]]]]]]]$

1 = [1, [2, [3, [4, [5, [6, [7, [8, [9, [10]]]]]]]]]