

CSE 20 Spring 2020
Quiz 2

Solutions

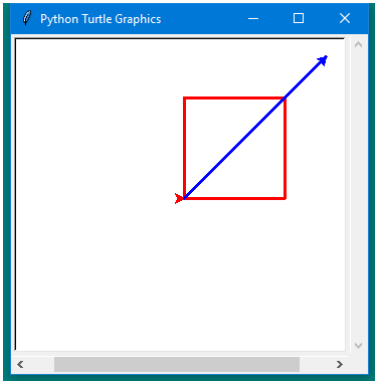
1. (25 Points) What is printed by the following Python program? Write the output below exactly as it would appear in the terminal window.

```
def foo(a, b):  
    return a+b  
#end foo()  
  
def bar(c, d):  
    return c*d  
#end bar()  
  
#-- main program -----  
print(foo(3, 5)+bar(3, 4))  
print(foo("three", "five")+bar(2, "four"))  
print(bar(3, foo("one", "two")))
```

Program output:

```
20  
threefivefourfour  
onetwoonetwoonetwo
```

2. (25 Points) Complete the Python program below that creates two turtle objects called alice and bob. Alice will draw a red square whose lower left corner is the point (0,0), and whose side length is 100 pixels. Bob will draw a blue line of length 200 starting at (0,0) and passing through the upper right corner of Alice's square. The picture drawn by the resulting program is shown below.



```
import turtle

wn = turtle.Screen()
alice = turtle.Turtle()
bob = turtle.Turtle()

# your code starts here

alice.color("red")
alice.forward(100)
alice.left(90)
alice.forward(100)
alice.left(90)
alice.forward(100)
alice.left(90)
alice.forward(100)
alice.left(90)

bob.color("blue")
bob.left(45)
bob.forward(200)

# your code ends here

wn.mainloop()
```