In-Class Question 9

Question)

Here is a turtle program.

```python
import turtle

turtle.speed(0)
turtle.bgcolor("black") # Change turtle background to black
turtle.hideturtle()
turtle.up()
turtle.backward(300)
turtle.right(90)
turtle.backward(250)

lyrics = [
    "Why are there so many songs about rainbows",
    "And what's on the other side?",
    "Rainbows are visions",
    "But only illusions",
    "And rainbows have nothing to hide",
    "So we've been told and some choose to believe it",
    "I know they're wrong, wait and see",
    "Someday we'll find it",
    "The rainbow connection",
    "The lovers, the dreamers, and me"
]

colors = ["red", "orange", "yellow",
          "lime", "blue", "purple"]

for line in range(len(lyrics)):
    turtle.color(colors[ SEE_QUESTION ])
    turtle.write(lyrics[line], font=("Arial", 20, "bold"))
    turtle.forward(50)

turtle.done()
```
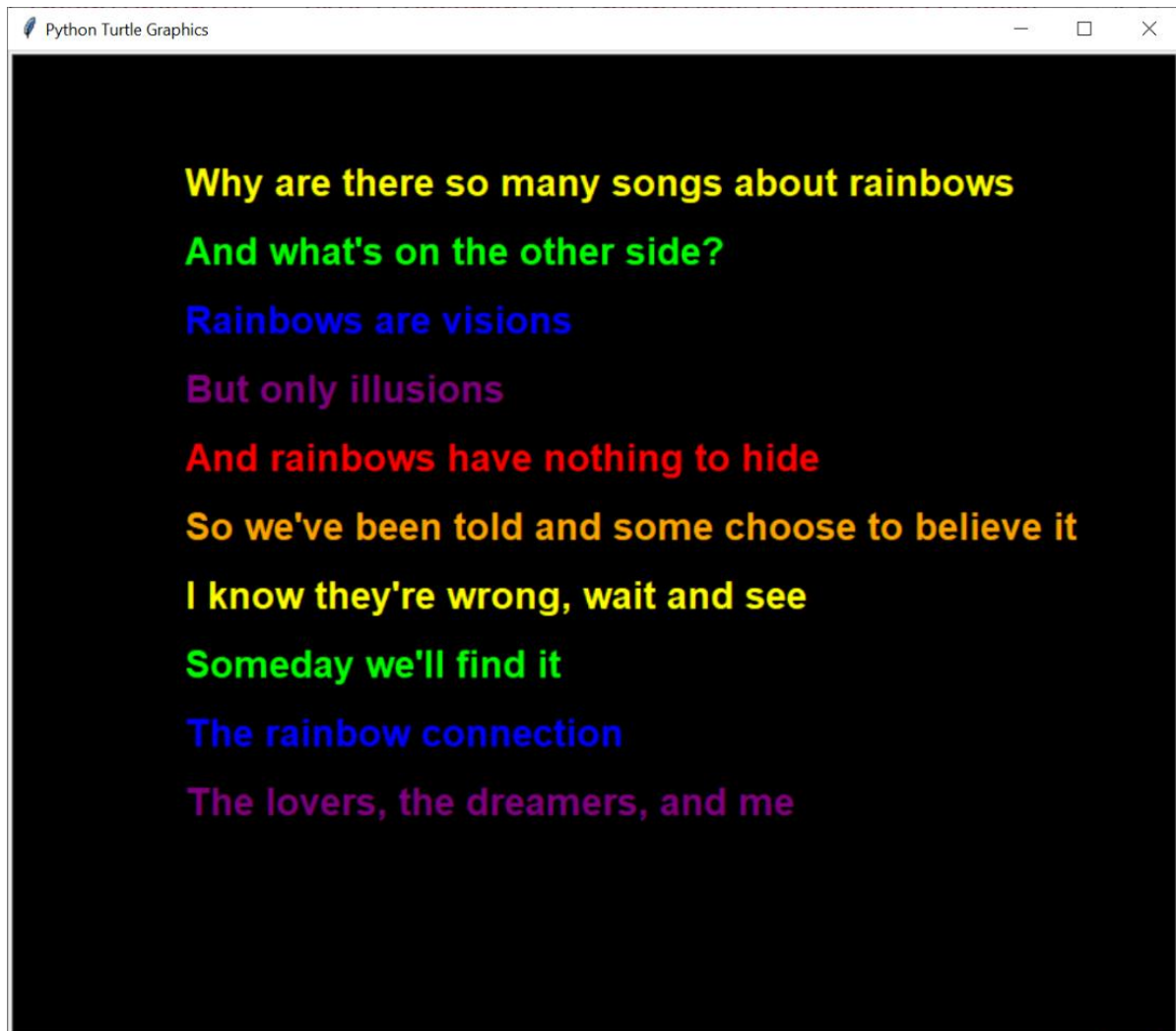
The program shows the lyrics of the song 'The Rainbow Connection' in rainbow colours like this.

The colours of the lines from top to bottom is yellow, lime (i.e. green), blue, purple, red, orange, yellow, lime, blue and purple.

As you can see, the content of **SEE_QUESTION** is not shown in the above code.

How many of the following can be used to replace **SEE_QUESTION** so the above result is shown? For your answer, enter an integer in the range 0 to 15 inclusive.

- `line`
- `line % len(colors)`
- `line % (len(colors) - 1)`
- `(line + 2) % len(colors)`
- `(line + 6) % len(colors)`
- `(line + 8) % len(colors)`

- `line % len(colors) + 2`
- `line % len(colors) + 6`
- `line % len(colors) + 8`
- `(line + 2) % (len(colors) - 1)`
- `(line + 6) % (len(colors) - 1)`
- `(line + 8) % (len(colors) - 1)`
- `line % (len(colors) - 1) + 2`
- `line % (len(colors) - 1) + 6`
- `line % (len(colors) - 1) + 8`