

day14 practice  
Due Monday 9/13/21

Today we're going to practice using things we've already learned. Please do the following:

1. Create a new program in repl. Name it day14 practice. Put your name in a comment at the top.
2. Create a while True: loop.
3. Inside the loop ask the user to enter a number from 0 to 500 to represent the air quality. Here's a chart representing the values, just for your info. We're talking about the index values in the third column.

Daily AQI Color	Levels of Concern	Values of Index	Description of Air Quality
Green	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

4. Use an if / elif / else structure to evaluate the air quality value that the user entered. For example, if the user entered 40 you might say "Level 40 indicates good air quality." and if the user entered 80 you might say "Level 80 indicates moderate air quality." In case you want to use the actual phrases from <https://www.airnow.gov/aqi/aqi-basics/> where I got this table I have pasted the text at the end of this document so you don't have to type it all, just copy and paste.
5. You need one if that checks if the entry is less than 51 to handle the "Good" rating, then an elif that checks if the entry is less than 101, etc. It would look like this:

```
if value < 51:  
    print("...")  
elif value < 101:  
    print("...")  
etc
```

up to an elif covering < 301, **then let the else handle everything else.** The else does not have a condition on it. If you need some help remembering how to do this, review our lesson on this from a few weeks ago [here](#).

6. After reporting on the air quality, ask the user if they would like to run again. If they choose not to, thank them and exit.
7. Test your program with four values (one to trigger each range of the if elif else structure. Include this output as a comment at the end of your program. (Not doing this means the highest score you can earn is 7/10.)
8. Create a share link and turn it in for this assignment. [I have a video showing you how to do this here if you get stuck.](#) In the video it is assignment 18 from last year; ignore that part, this is our day14 assignment. The next page has the copiable text of the actual airnow.gov air quality definitions to

help you.

Copiable text for warnings from Airnow.gov

<b>Daily AQI Color</b>	<b>Levels of Concern</b>	<b>Values of Index</b>	<b>Description of Air Quality</b>
<b>Green</b>	<b>Good</b>	<b>0 to 50</b>	<b>Air quality is satisfactory, and air pollution poses little or no risk.</b>
<b>Yellow</b>	<b>Moderate</b>	<b>51 to 100</b>	<b>Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.</b>
<b>Orange</b>	<b>Unhealthy for Sensitive Groups</b>	<b>101 to 150</b>	<b>Members of sensitive groups may experience health effects. The general public is less likely to be affected.</b>
<b>Red</b>	<b>Unhealthy</b>	<b>151 to 200</b>	<b>Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.</b>
<b>Purple</b>	<b>Very Unhealthy</b>	<b>201 to 300</b>	<b>Health alert: The risk of health effects is increased for everyone.</b>
<b>Maroon</b>	<b>Hazardous</b>	<b>301 and higher</b>	<b>Health warning of emergency conditions: everyone is more likely to be affected.</b>