Kimberly Rodriguez
2/14/2024

Question 3) Construct a factor variable (without using factor, as.factor, or related functions) that contain the weather forecast for Portland over the next 14 days (i.e., excluding today). (2.5 points)
• There should be 5 levels - sun, partial clouds, clouds, rain, snow.
• Start with an integer vector and add the appropriate attributes in.

Portland, OR 10 Day Weather

12:36 pm PDT 🖶 Print

DAY		DESCRIPTION	HIGH / LOW	PRECP	WIND	HUMIDITY
TODAY APR 7		Partly Cloudy	62°/30°	/ 0%	N 0 mph	47%
WED APR 8		Sunny	72°/44°	/ 10%	NNE 10 mph	52%
THU APR 9		Sunny	74°/46°	/ 0%	N 10 mph	40%
FRI APR 10		Partly Cloudy	61°/44°	/ 10%	W 7 mph	66%
SAT APR 11		Partly Cloudy	61°/40°	/ 20%	W 7 mph	56%
SUN APR 12		Mostly Sunny	61°/40°	/ 0%	NE 8 mph	39%
MON APR 13		Partly Cloudy	63°/44°	/ 10%	N 6 mph	38%
TUE APR 14		Partly Cloudy	60°/43°	/ 20%	SW 6 mph	52%
WED APR 15		Partly Cloudy	63°/43°	/ 20%	W 6 mph	58%
THU APR 16		Partly Cloudy	63°/44°	/ 20%	ENE 7 mph	54%
FRI APR 17		Partly Cloudy	63°/45°	/ 20%	SSW 7 mph	60%
SAT APR 18		Mostly Cloudy	61°/44°	/ 20%	SW 8 mph	64%
SUN APR 19		AM Showers	62°/45°	/ 40%	SW 8 mph	62%
MON APR 20		Mostly Cloudy	62°/45°	/ 20%	SW 7 mph	64%
TUE APR 21		AM Showers	64°/48°	/ 30%	WSW 8 mph	62%

forecast <- c(1, 1, 2, 2, 1, 2, 2, 2, 2, 2, 3, 4, 3, 4)
weather_levels <- c("sun", "partial clouds", "clouds", "rain", "snow")

forecast_data <- data.frame(
    Day = 1:14,
    Weather = weather_levels[forecast],

```
    High = c(62, 72, 74, 64, 61, 64, 68, 60, 63, 63, 63, 61, 62, 62), # Start with 62
    Low = c(39, 44, 45, 44, 40, 40, 44, 43, 43, 44, 45, 44, 45, 45),    # Start with 39
    Precip = c(0, 0.10, 0, 0.10, 0.20, 0, 0.10, 0.20, 0.20, 0.20, 0.20, 0.20, 0.40, 0.20),
    Wind = c(8, 10, 10, 7, 7, 8, 6, 6, 6, 7, 7, 8, 8, 7),
    Humidity = c(47, 52, 49, 68, 56, 39, 38, 53, 58, 54, 60, 64, 63, 64)
)
> forecast_data
```

	Day	Weather	High	Low	Precip	Wind	Humidity
1	1	sun	62	39	0.0	8	47
2	2	sun	72	44	0.1	10	52
3	3	partial clouds	74	45	0.0	10	49
4	4	partial clouds	64	44	0.1	7	68
5	5	sun	61	40	0.2	7	56
6	6	partial clouds	64	40	0.0	8	39
7	7	partial clouds	68	44	0.1	6	38
8	8	partial clouds	60	43	0.2	6	53
9	9	partial clouds	63	43	0.2	6	58
10	10	partial clouds	63	44	0.2	7	54
11	11	clouds	63	45	0.2	7	60
12	12	rain	61	44	0.2	8	64
13	13	clouds	62	45	0.4	8	63
14	14	rain	62	45	0.2	7	64