

C2_W2_assignment

Thi NGUYEN

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Question 1:

```
pollutantmean("specdata", "nitrate", 70:72)
```

```
## [1] 1.706047
```

Question 2:

```
pollutantmean("specdata", "sulfate", 34)
```

```
## [1] 1.477143
```

Question 3:

```
pollutantmean("specdata", "nitrate")
```

```
## [1] 1.702932
```

Question 4:

```
cc <- complete("specdata", c(6, 10, 20, 34, 100, 200, 310))  
print(cc$nobs)
```

```
## [1] 228 148 124 165 104 460 232
```

Question 5:

```
cc <- complete("specdata", 54)  
print(cc$nobs)
```

```
## [1] 219
```

Question 6:

```
RNGversion("3.5.1")
```

```
## Warning in RNGkind("Mersenne-Twister", "Inversion", "Rounding"): non-uniform  
## 'Rounding' sampler used
```

```
set.seed(42)  
cc <- complete("specdata", 332:1)  
use <- sample(332, 10)  
print(cc[use, "nobs"])
```

```
## [1] 711 135 74 445 178 73 49 0 687 237
```

Question 7

```
cr <- corr("specdata")
cr <- sort(cr)
RNGversion("3.5.1")
```

```
## Warning in RNGkind("Mersenne-Twister", "Inversion", "Rounding"): non-uniform
## 'Rounding' sampler used
```

```
set.seed(868)
out <- round(cr[sample(length(cr), 5)], 4)
print(out)
```

```
## [1] 0.2567 0.0933 -0.0172 0.4050 0.0191
```

Question 8:

```
cr <- corr("specdata", 129)
cr <- sort(cr)
n <- length(cr)
RNGversion("3.5.1")
```

```
## Warning in RNGkind("Mersenne-Twister", "Inversion", "Rounding"): non-uniform
## 'Rounding' sampler used
```

```
set.seed(197)
out <- c(n, round(cr[sample(n, 5)], 4))
print(out)
```

```
## [1] 243.0000 0.2540 0.0504 -0.1462 -0.1680 0.5969
```

Question 9:

```
cr <- corr("specdata", 2000)
n <- length(cr)
cr <- corr("specdata", 1000)
cr <- sort(cr)
print(c(n, round(cr, 4)))
```

```
## [1] 0.0000 -0.0190 0.0419 0.1901
```