

Statistical Programming Assignment 4

Sai Kumar Murarishetti
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Output of the Code:

```
Run ProbEst x
C:\Users\17738\PycharmProjects\pythonProject\venv\Scripts\python.exe C:\Users\17738\PycharmProjects\pythonProject\ProbEst.py
DATA-51100, Fall 2023
Sai Kumar Murarishetti
PROGRAMMING ASSIGNMENT #4

Prob(aspiration=std|make=alfa-romero) = 100.00%
Prob(aspiration=turbo|make=alfa-romero) = 0.00%
Prob(aspiration=std|make=audi) = 71.43%
Prob(aspiration=turbo|make=audi) = 28.57%
Prob(aspiration=std|make=bmw) = 100.00%
Prob(aspiration=turbo|make=bmw) = 0.00%
Prob(aspiration=std|make=chevrolet) = 100.00%
Prob(aspiration=turbo|make=chevrolet) = 0.00%
Prob(aspiration=std|make=dodge) = 66.67%
Prob(aspiration=turbo|make=dodge) = 33.33%
Prob(aspiration=std|make=honda) = 100.00%
Prob(aspiration=turbo|make=honda) = 0.00%
Prob(aspiration=std|make=isuzu) = 100.00%
Prob(aspiration=turbo|make=isuzu) = 0.00%
Prob(aspiration=std|make=jaguar) = 100.00%
Prob(aspiration=turbo|make=jaguar) = 0.00%
Prob(aspiration=std|make=mazda) = 100.00%
Prob(aspiration=turbo|make=mazda) = 0.00%
Prob(aspiration=std|make=mercedes-benz) = 50.00%
Prob(aspiration=turbo|make=mercedes-benz) = 50.00%
```

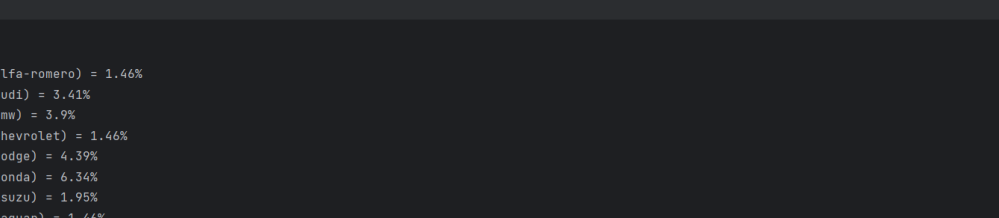
```
Run ProbEst x
Prob(aspiration=std|make=mazda) = 100.00%
Prob(aspiration=turbo|make=mazda) = 0.00%
Prob(aspiration=std|make=mercedes-benz) = 50.00%
Prob(aspiration=turbo|make=mercedes-benz) = 50.00%
Prob(aspiration=std|make=mercury) = 0.00%
Prob(aspiration=turbo|make=mercury) = 100.00%
Prob(aspiration=std|make=mitsubishi) = 53.85%
Prob(aspiration=turbo|make=mitsubishi) = 46.15%
Prob(aspiration=std|make=nissan) = 94.44%
Prob(aspiration=turbo|make=nissan) = 5.56%
Prob(aspiration=std|make=peugot) = 45.45%
Prob(aspiration=turbo|make=peugot) = 54.55%
Prob(aspiration=std|make=plymouth) = 71.43%
Prob(aspiration=turbo|make=plymouth) = 28.57%
Prob(aspiration=std|make=porsche) = 100.00%
Prob(aspiration=turbo|make=porsche) = 0.00%
Prob(aspiration=std|make=renault) = 100.00%
Prob(aspiration=turbo|make=renault) = 0.00%
Prob(aspiration=std|make=saab) = 66.67%
Prob(aspiration=turbo|make=saab) = 33.33%
Prob(aspiration=std|make=subaru) = 83.33%
Prob(aspiration=turbo|make=subaru) = 16.67%
Prob(aspiration=std|make=toyota) = 96.88%
Prob(aspiration=turbo|make=toyota) = 3.12%
Prob(aspiration=std|make=volkswagen) = 83.33%
```

Assignment 4

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```
Run ProbEst.py
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↕
Prob(aspiration=turbo|make=nissan) = 5.56%
Prob(aspiration=std|make=peugot) = 45.45%
Prob(aspiration=turbo|make=peugot) = 54.55%
Prob(aspiration=std|make=plymouth) = 71.43%
Prob(aspiration=turbo|make=plymouth) = 28.57%
Prob(aspiration=std|make=porsche) = 100.00%
Prob(aspiration=turbo|make=porsche) = 0.00%
Prob(aspiration=std|make=renault) = 100.00%
Prob(aspiration=turbo|make=renault) = 0.00%
Prob(aspiration=std|make=saab) = 66.67%
Prob(aspiration=turbo|make=saab) = 33.33%
Prob(aspiration=std|make=subaru) = 83.33%
Prob(aspiration=turbo|make=subaru) = 16.67%
Prob(aspiration=std|make=toyota) = 96.88%
Prob(aspiration=turbo|make=toyota) = 3.12%
Prob(aspiration=std|make=volkswagen) = 83.33%
Prob(aspiration=turbo|make=volkswagen) = 16.67%
Prob(aspiration=std|make=volvo) = 54.55%
Prob(aspiration=turbo|make=volvo) = 45.45%

Prob(make=alfa-romero) = 1.46%
Prob(make=audi) = 3.41%
Prob(make=bmw) = 3.9%
Prob(make=chevrolet) = 1.46%
```

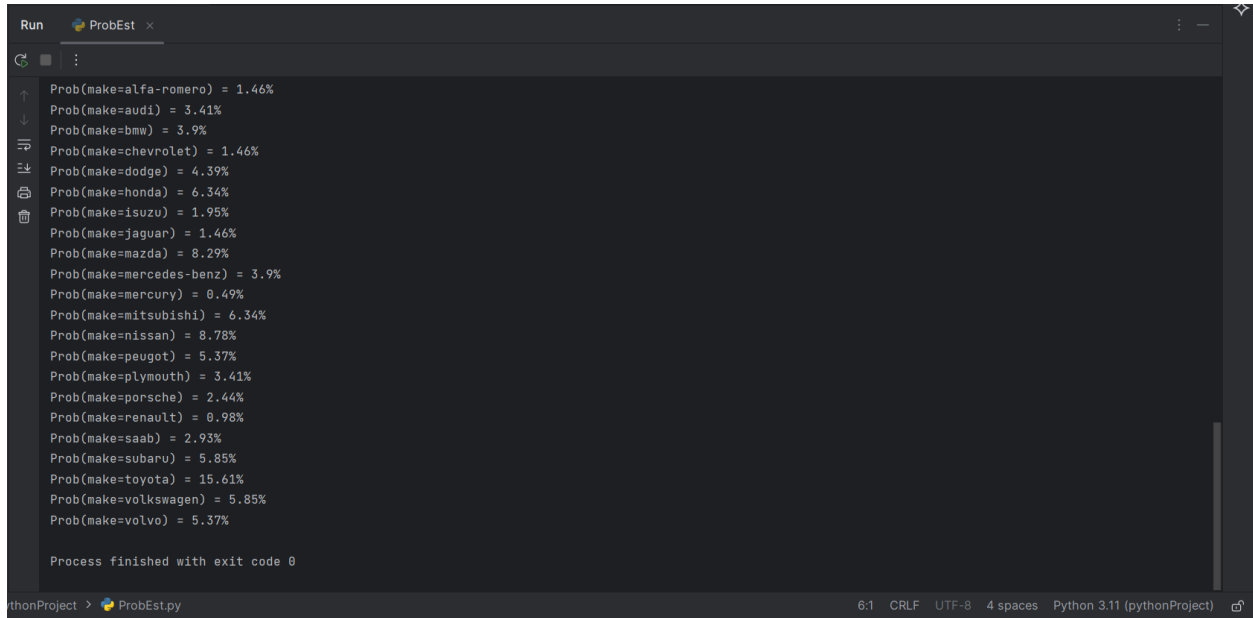


```
Run ProbEst x
↑
↓
Prob(make=alfa-romero) = 1.46%
Prob(make=audi) = 3.41%
Prob(make=bmw) = 3.9%
Prob(make=chevrolet) = 1.46%
Prob(make=dodge) = 4.39%
Prob(make=honda) = 6.34%
Prob(make=isuzu) = 1.95%
Prob(make=jaguar) = 1.46%
Prob(make=mazda) = 8.29%
Prob(make=mercedes-benz) = 3.9%
Prob(make=mercury) = 0.49%
Prob(make=mitsubishi) = 6.34%
Prob(make=nissan) = 8.78%
Prob(make=peugeot) = 5.37%
Prob(make=plymouth) = 3.41%
Prob(make=porsche) = 2.44%
Prob(make=renault) = 0.98%
Prob(make=saab) = 2.93%
Prob(make=subaru) = 5.85%
Prob(make=toyota) = 15.61%
Prob(make=volkswagen) = 5.85%
Prob(make=volvo) = 5.37%
PythonProject > ProbEst.py 6:1 CRLF UTF-8 4 spaces Python 3.11 (pythonProject)
```

Statistical Programming

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```
Run ProbEst x
↑
↓
Prob(make=alfa-romero) = 1.46%
Prob(make=audi) = 3.41%
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Prob(make=chevrolet) = 1.46%
Prob(make=dodge) = 4.39%
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Prob(make=peugot) = 5.37%
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Prob(make=renault) = 0.98%
Prob(make=saab) = 2.93%
Prob(make=subaru) = 5.85%
Prob(make=toyota) = 15.61%
Prob(make=volkswagen) = 5.85%
Prob(make=volvo) = 5.37%

Process finished with exit code 0

PythonProject > ProbEst.py 6:1 CRLF UTF-8 4 spaces Python 3.11 (pythonProject)
```