```
def get_pdf_probability(dataset,startrange,endrange):
```

This is the function definition.

```
from matplotlib import pyplot
from scipy.stats import norm
import seaborn as sns
```

These lines import the necessary libraries.

```
ax = sns.distplot(dataset,kde=True,kde_kws={'color':'blue'},color='Green')
```

This line creates a distribution plot of the dataset. The `kde=True` argument tells Seaborn to use a kernel density estimate to create the plot. The `kde_kws={'color':'blue'}` argument tells Seaborn to use a blue color for the kernel density estimate. The `color='Green'` argument tells Seaborn to use a green color for the bars of the distribution plot.

```
pyplot.axvline(startrange,color='Red')
pyplot.axvline(endrange,color='Red')
```

These lines draw two vertical lines on the distribution plot, one at the startrange and one at the endrange.

```
# generate a sample
sample = dataset
```

This line creates a sample from the dataset.

```
# calculate parameters
sample_mean =sample.mean()
sample_std = sample.std()
print('Mean=%.3f, Standard Deviation=%.3f' % (sample_mean, sample_std))
```

These lines calculate the mean and standard

Code

```
# define the distribution
dist = norm(sample_mean, sample_std)
```

This line defines a normal distribution with the mean and standard deviation of the sample.

Code

```
# sample probabilities for a range of outcomes
values = [value for value in range(startrange, endrange)]
probabilities = [dist.pdf(value) for value in values]
```

These lines calculate the probabilities of the values in the range `startrange` to `endrange`. The `dist.pdf()` function returns the probability density function of the distribution. The probability density function is a function that gives the probability of a value occurring.

Code

```
prob=sum(probabilities)
print("The area between
range({},{}):{}".format(startrange,endrange,sum(probabilities)))
```

These lines calculate the area under the probability density function between the startrange and endrange. The `sum()` function adds up all the probabilities in the list `probabilities`. The `print()` function prints the area.

Code

```
return prob
```

This line returns the area.