

### Shanmugan Problem 8.4

%Solution for Shanmugan 8.4

```
C1=[3.42, 3.48, 3.48, 3.54, 3.51, 3.48, 3.57, 3.59, 3.63, 3.50, 3.45, 3.51,  
3.55, 3.59, 3.50, 3.61];
```

```
meanC1_cal=sum(C1)/length(C1) %Calculation of mean
```

```
meanC1_Matlab=mean(C1) % verifikation
```

```
varC1_cal=1/(length(C1)-1).*sum((C1-meanC1).^2) %Calculation of variance
```

```
varC1_Matlab=var(C1) % verifikation
```

```
varC1_bias=1/length(C1).*sum((C1-meanC1).^2) %Calculation of biased variance
```

```
meanC1_cal = 3.5256
```

```
meanC1_Matlab = 3.5256
```

```
varC1_cal = 0.0036
```

```
varC1_Matlab = 0.0036
```

```
varC1_bias = 0.0034
```