

```
In [12]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from statsmodels.distributions.empirical_distribution import ECDF
```

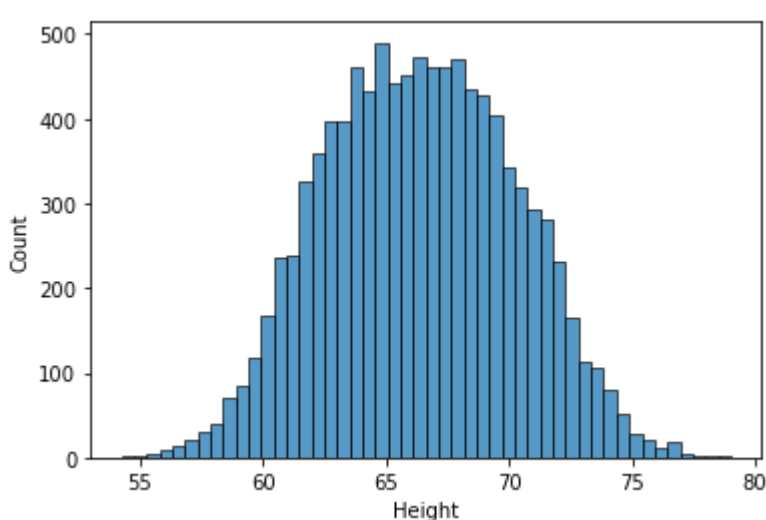
```
In [5]: df=pd.read_csv("weight-height.csv")
df
```

Out[5]:

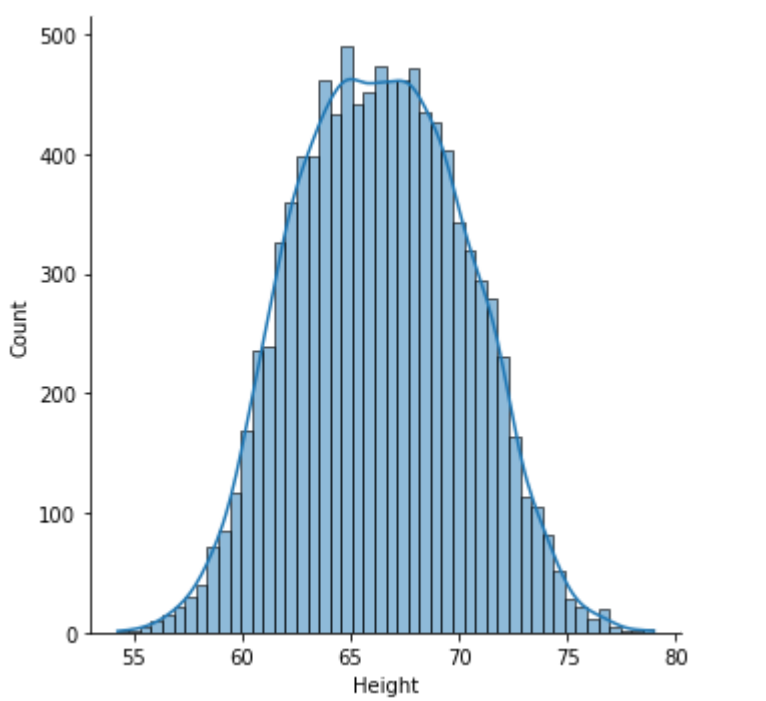
	Gender	Height	Weight
0	Male	73.847017	241.893563
1	Male	68.781904	162.310473
2	Male	74.110105	212.740856
3	Male	71.730978	220.042470
4	Male	69.881796	206.349801
...	...	...	...
9995	Female	66.172652	136.777454
9996	Female	67.067155	170.867906
9997	Female	63.867992	128.475319
9998	Female	69.034243	163.852461
9999	Female	61.944246	113.649103

10000 rows × 3 columns

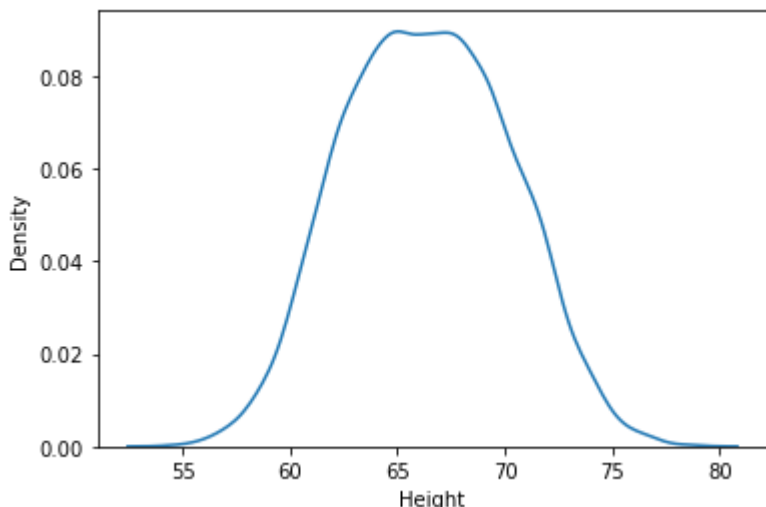
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In [7]: sns.histplot(df[\"Height\"])\nplt.show()
```



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In [9]: sns.displot(df[\"Height\"],kde=True)\nplt.show()
```



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In [10]: sns.kdeplot(df[\"Height\"])\nplt.show()
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In [11]: df[\"Height\"].describe()
```

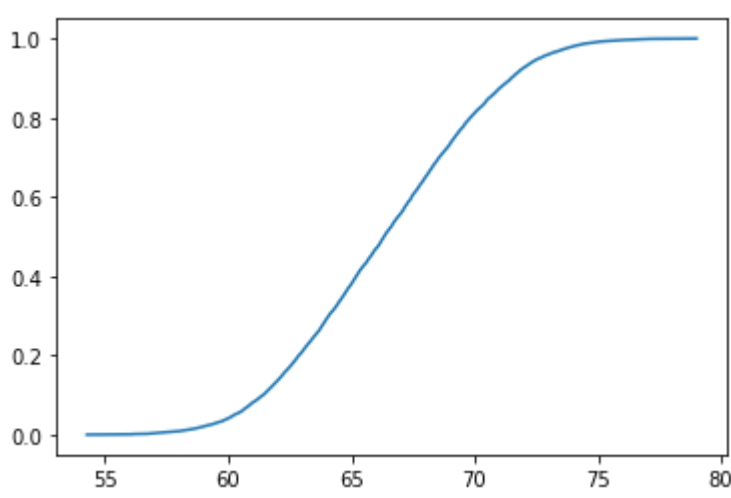
Out[11]:

count	10000.000000
mean	66.367560
std	3.847528
min	54.283133
25%	63.505620
50%	66.318870
75%	69.174262
max	78.998742
Name: Height, dtype: float64	

```
In [14]: e=ECDF(df[\"Height\"])
```

```
In [15]: plt.plot(e.x,e.y)
```

Out[15]:

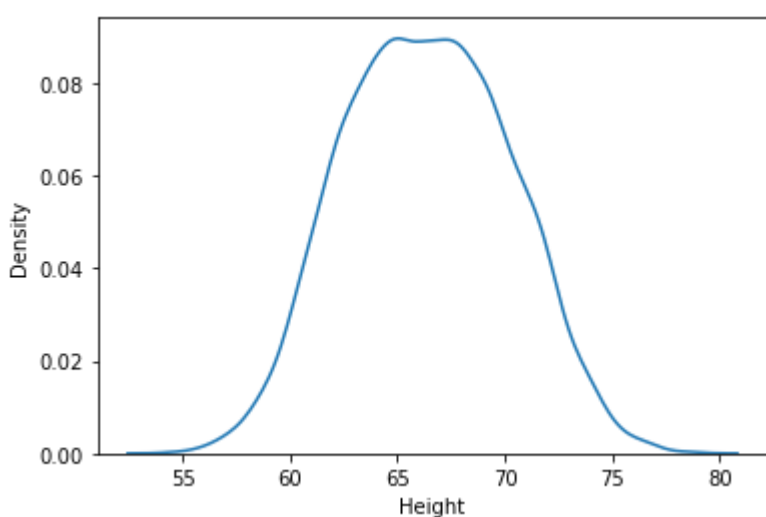


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In [ ]:
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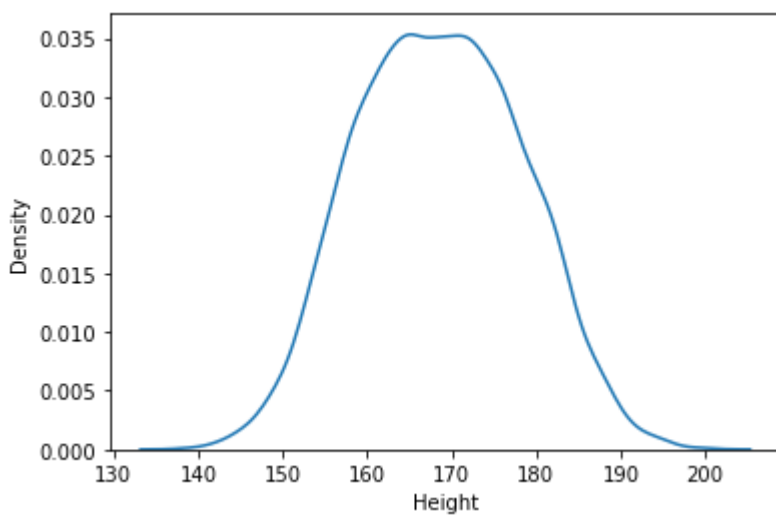
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```
In [16]: sns.kdeplot(df[\"Height\"])\nplt.show()
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In [17]: sns.kdeplot(df[\"Height\"]*2.54)\nplt.show()
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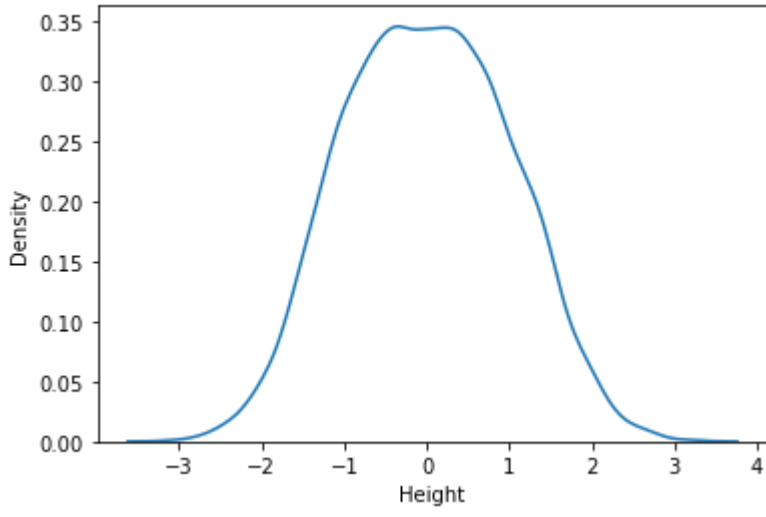


```
In [18]: z_score=(df[\"Height\"]-df[\"Height\"].mean())/df[\"Height\"].std()\nz_score
```

Out[18]:

0	1.943964
1	0.627505
2	2.012343
3	1.393991
4	0.913375
...	
9995	-0.050658
9996	0.181830
9997	-0.649655
9998	0.693990
9999	-1.149651
Name: Height, Length: 10000, dtype: float64	

```
In [19]: sns.kdeplot(z_score)\nplt.show()
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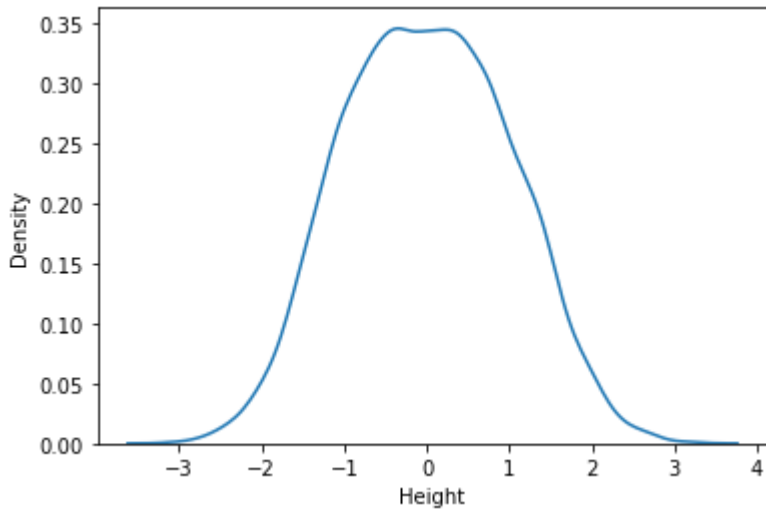


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In [21]: z_score1=((df[\"Height\"]*2.54)-(df[\"Height\"]*2.54).mean())/((df[\"Height\"]*2.54).std())\nz_score1
```

Out[21]:

0	1.943964
1	0.627505
2	2.012343
3	1.393991
4	0.913375
...	
9995	-0.050658
9996	0.181830
9997	-0.649655
9998	0.693990
9999	-1.149651
Name: Height, Length: 10000, dtype: float64	

```
In [22]: sns.kdeplot(z_score1)\nplt.show()
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