```
In [33]:
           import pandas as pd
In [34]:
           df=pd.read_csv("weight.csv")
Out[34]:
                Gender
                          Height
                                     Weight
                  Male 73.847017 241.893563
             1
                  Male 68.781904 162.310473
             2
                  Male 74.110105 212.740856
             3
                  Male 71.730978 220.042470
                  Male 69.881796 206.349801
             4
          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
In [35]:
           df.drop("Gender",axis=1,inplace=True)
In [39]:
           df
Out[39]:
                  Height
                             Weight
             0 73.847017 241.893563
             1 68.781904 162.310473
             2 74.110105 212.740856
             3 71.730978 220.042470
             4 69.881796 206.349801
          9995 66.172652 136.777454
          9996 67.067155 170.867906
          9997 63.867992 128.475319
          9998 69.034243 163.852461
```

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```
Height
                             Weight
          9999 61.944246 113.649103
In [38]:
           df.boxplot()
          <AxesSubplot:>
Out[38]:
                                                    φ
          250
          200
          150
          100
           50
                        Height
                                                  Weight
In [40]:
           from scipy import stats
In [41]:
           import numpy as np
In [44]:
           z=np.abs(stats.zscore(df))
In [45]:
Out[45]:
                 Height Weight
             0 1.944061 2.505797
             1 0.627537 0.027101
             2 2.012443 1.597806
             3 1.394060 1.825222
             4 0.913421 1.398750
          9995 0.050660 0.768151
          9996 0.181839 0.293631
          9997 0.649688 1.026730
          9998 0.693125 0.075127
          9999 1.149708 1.488507
```

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Ds exp-2 21229040028

10000 rows × 2 columns

```
In [46]:
           df1=df.copy()
In [47]:
           df1=df1[(z<3).all(axis=1)]
In [48]:
           df2=df.copy()
In [49]:
           q1=df2.quantile(0.25)
In [50]:
           q3=df2.quantile(0.75)
In [51]:
           IQR=q3-q1
In [53]:
           df2_new=df2[((df2>=q1-1.5*IQR)&(df2<=q3+1.5*IQR)).all(axis=1)]
           df2_new
Out[53]:
                  Height
                             Weight
             0 73.847017 241.893563
             1 68.781904 162.310473
             2 74.110105 212.740856
             3 71.730978 220.042470
             4 69.881796 206.349801
          9995 66.172652 136.777454
          9996 67.067155 170.867906
          9997 63.867992 128.475319
          9998 69.034243 163.852461
          9999 61.944246 113.649103
         9992 rows × 2 columns
```

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