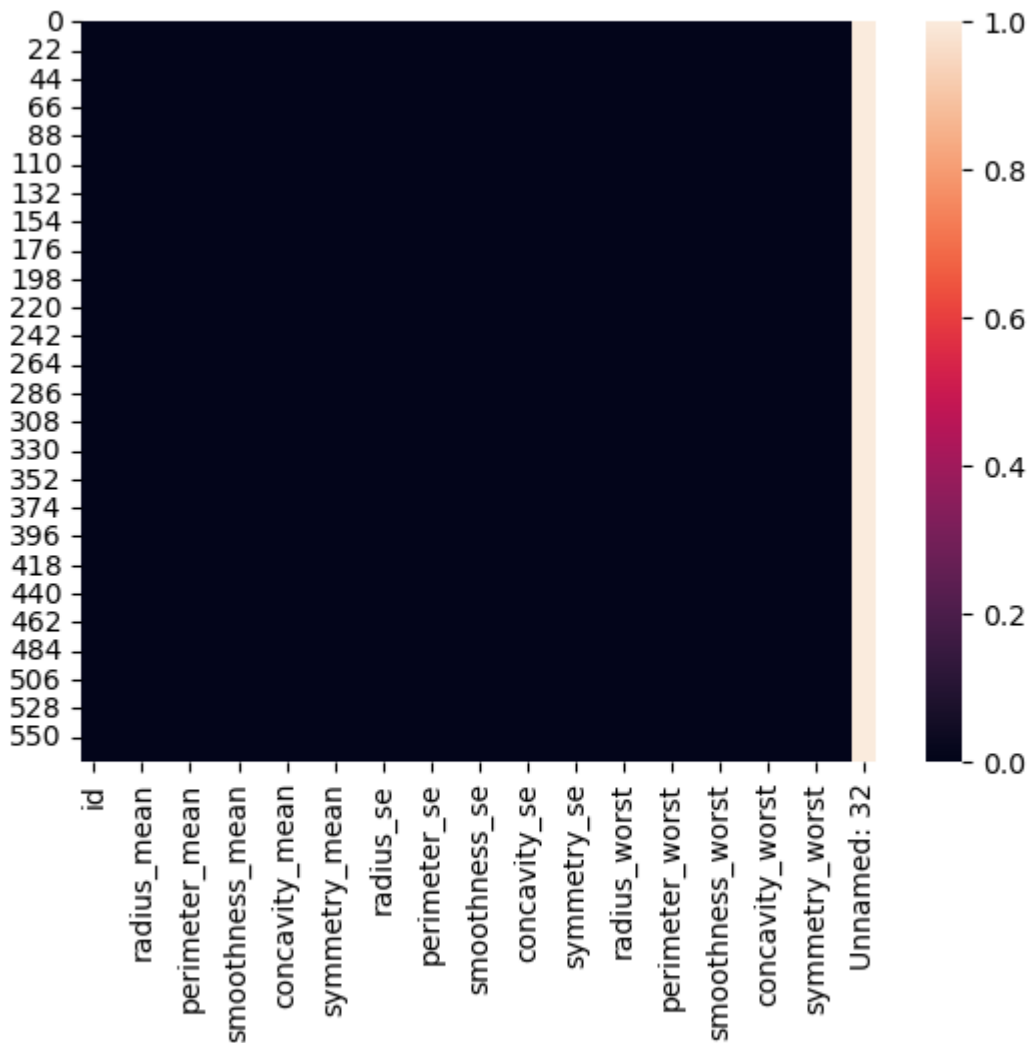


- Checking Null values using the heatmap

```
sns.heatmap(df.isnull())
```

<Axes: >



from the heatmap we can see that there is a unnamed column who is completely empty

So we are going to drop it

- Convert the Target Variable to 0s and 1s

```
df['diagnosis'] = [1 if value == 'M' else 0 for value in df.diagnosis]
```

```
df['diagnosis']
```

```
0      1
1      1
2      1
3      1
4      1
..
564    1
565    1
566    1
567    1
568    0
Name: diagnosis, Length: 569, dtype: int64
```

Turning into Category Type

```
df['diagnosis'] = df['diagnosis'].astype('category', copy=False)
df['diagnosis'].value_counts().plot(kind='bar')
plt.show()
```

