In [2]:
```
import pandas as pd
import seaborn as sns
```

```
Matplotlib is building the font cache; this may take a moment.
```

In [4]:
```
df=pd.read_csv('product.csv')
```

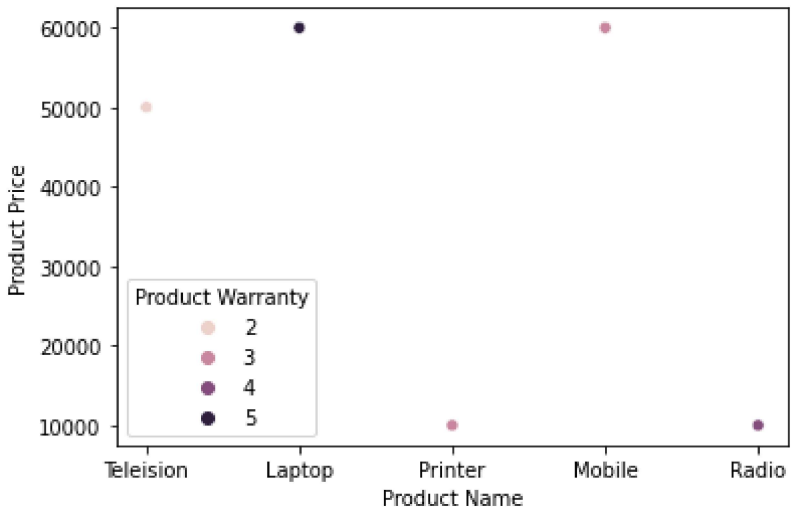
In [13]:
```
df
```

Out[13]:

	Product Name	Product Price	Product Quantity	Product Warranty	Total
0	Teleision	50000	4	2	200000
1	Laptop	60000	2	5	120000
2	Printer	10000	6	3	60000
3	Mobile	60000	3	3	180000
4	Radio	10000	2	4	20000

In [12]:
```
sns.scatterplot(x=df['Product Name'],y=df['Product Price'],hue=df['Product Warra
```

Out[12]:
```
<Axes: xlabel='Product Name', ylabel='Product Price'>
```



In [14]:
```
df1=pd.read_csv('business.csv')
```

In [16]:
```
df1
```

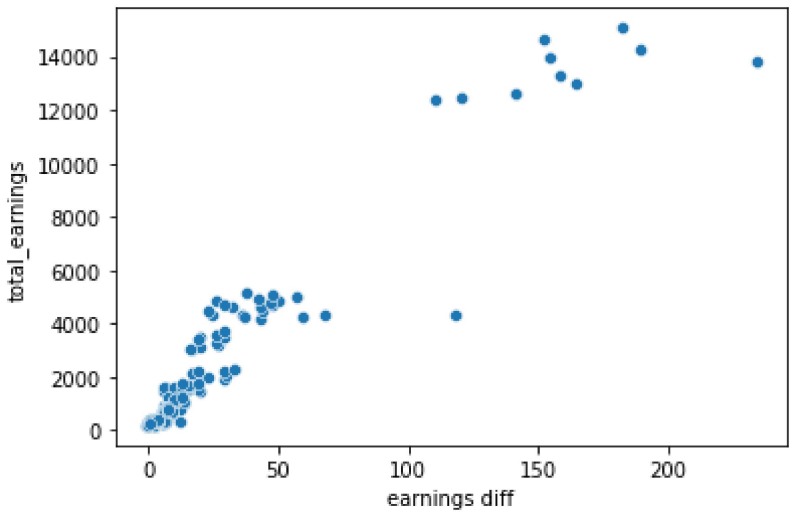
Out[16]:

	period	series_reference	region_name	filled jobs	filled jobs revised	filled jobs diff	filled jobs % diff	total_earnin
0	2020.09	BDCQ.SED1RA	Northland	65520	65904	384	0.6	9
1	2020.09	BDCQ.SED1RB	Auckland	708372	714506	6134	0.9	124
2	2020.09	BDCQ.SED1RC	Waikato	198776	200265	1489	0.7	30
3	2020.09	BDCQ.SED1RD	Bay of Plenty	127323	128540	1217	1.0	18
4	2020.09	BDCQ.SED1RE	Gisborne	20417	20632	215	1.1	2
...	...	...	...	...	...	...	...	
155	2022.12	BDCQ.SED1RL	Marlborough	25707	25909	202	0.8	4
156	2022.12	BDCQ.SED1RM	West Coast	14315	14347	32	0.2	2
157	2022.12	BDCQ.SED1RN	Canterbury	296998	299921	2923	1.0	51
158	2022.12	BDCQ.SED1RO	Otago	109243	110509	1266	1.2	17
159	2022.12	BDCQ.SED1RP	Southland	46964	47437	473	1.0	7

160 rows × 11 columns

In [20]:
```
sns.scatterplot(x=df1['earnings diff'],y=df1['total_earnings'])
```

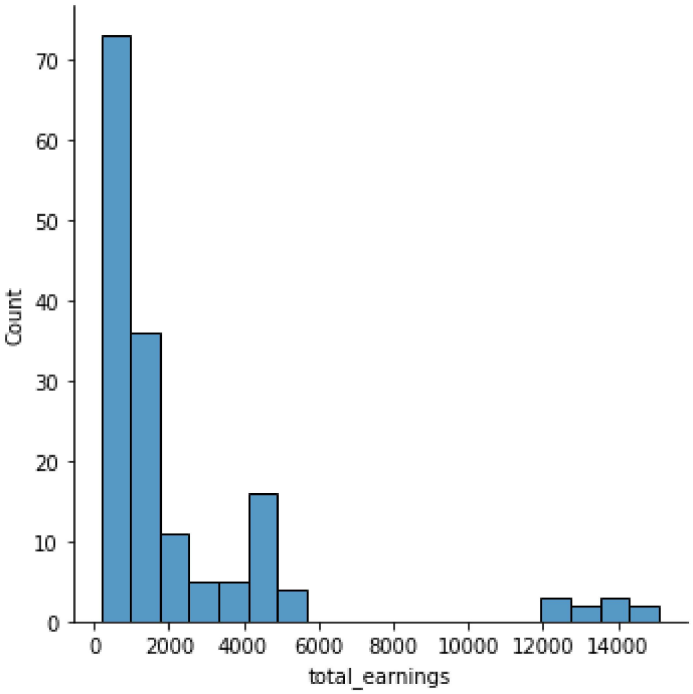
Out[20]: <Axes: xlabel='earnings diff', ylabel='total_earnings'>



In [22]:
```
sns.displot(x=df1['total_earnings'])
```

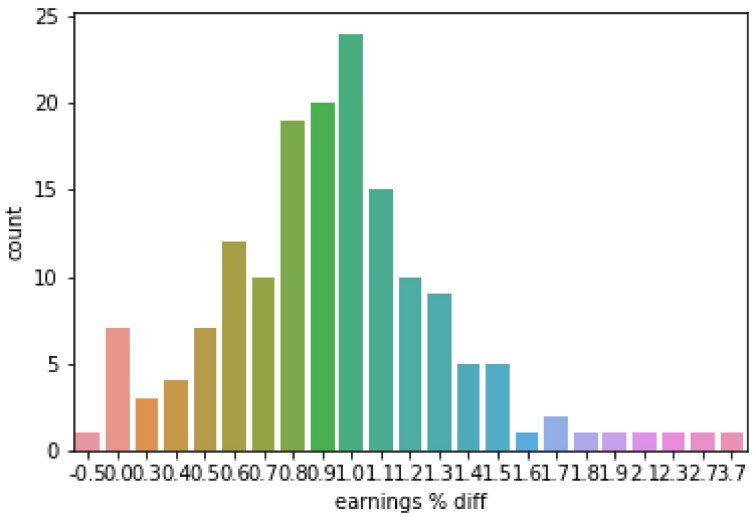
```
C:\Users\Pavithra\AppData\Local\Programs\Python\Python310\lib\site-packages\seaborn\axisgrid.py:118: UserWarning: The figure layout has changed to tight
  self._figure.tight_layout(*args, **kwargs)
```

Out[22]: <seaborn.axisgrid.FacetGrid at 0x2880b6fd720>



In [26]:
```
sns.countplot(x=df1['earnings % diff'])
```

Out[26]:
```
<Axes: xlabel='earnings % diff', ylabel='count'>
```



In [32]:
```
df1=df1[0:100]
```

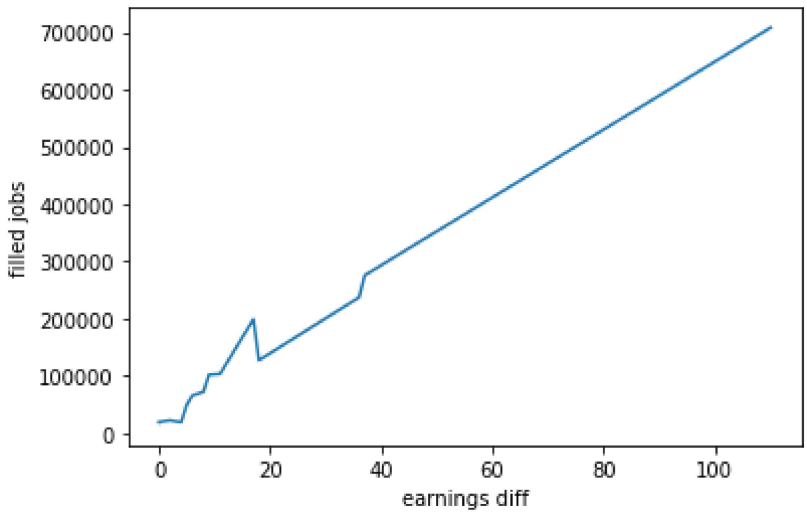
In [28]:
```
df1
```

Out[28]:

	period	series_reference	region_name	filled jobs	filled jobs revised	filled jobs diff	filled jobs % diff	total_earning
0	2020.09	BDCQ.SED1RA	Northland	65520	65904	384	0.6	95
1	2020.09	BDCQ.SED1RB	Auckland	708372	714506	6134	0.9	1242
2	2020.09	BDCQ.SED1RC	Waikato	198776	200265	1489	0.7	304
3	2020.09	BDCQ.SED1RD	Bay of Plenty	127323	128540	1217	1.0	188
4	2020.09	BDCQ.SED1RE	Gisborne	20417	20632	215	1.1	27
5	2020.09	BDCQ.SED1RF	Hawke's Bay	71967	72600	633	0.9	102
6	2020.09	BDCQ.SED1RG	Taranaki	49239	49599	360	0.7	74
7	2020.09	BDCQ.SED1RH	Manawatu-Whanganui	101946	102617	671	0.7	145
8	2020.09	BDCQ.SED1RI	Wellington	237102	239076	1974	0.8	435
9	2020.09	BDCQ.SED1RJ	Tasman	22298	22482	184	0.8	30
10	2020.09	BDCQ.SED1RK	Nelson	19009	19190	181	1.0	26
11	2020.09	BDCQ.SED1RL	Marlborough	24745	24844	99	0.4	34
12	2020.09	BDCQ.SED1RM	West Coast	13626	13646	20	0.1	19
13	2020.09	BDCQ.SED1RN	Canterbury	275569	278290	2721	1.0	423
14	2020.09	BDCQ.SED1RO	Otago	103405	104211	806	0.8	147

In [34]:
```
sns.lineplot(x=df1['earnings diff'],y=df1['filled jobs'])
```

Out[34]:
```
<Axes: xlabel='earnings diff', ylabel='filled jobs'>
```



In [36]:
```
df1['total_earnings'].sum()
```

Out[36]:
```
32979
```

In [37]:
```
df1['earnings diff'].sum()
```

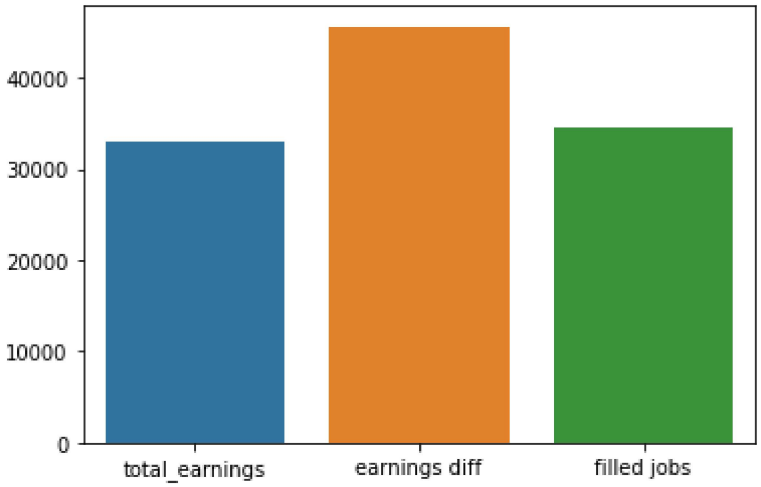
Out[37]: 266

In [39]:
```
df1['filled jobs'].sum()
```

Out[39]: 2039314

In [40]:
```
sns.barplot(x=['total_earnings','earnings diff','filled jobs'],y=[32979,45567,34
```

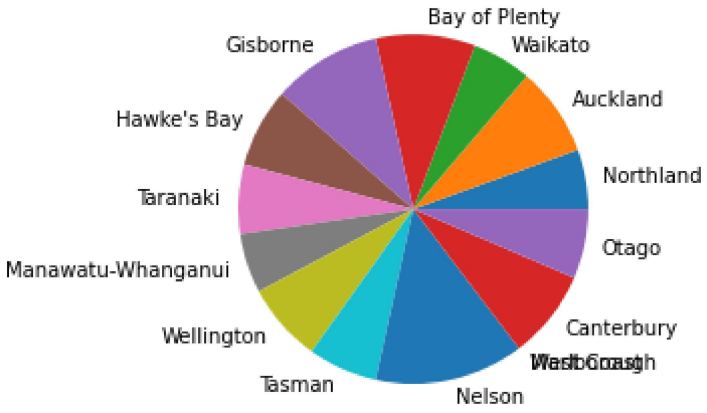
Out[40]: <Axes: >



In [41]:
```
import matplotlib.pyplot as plt
```

In [48]:
```
plt.pie(x=df1['earnings % diff'],labels=df1['region_name'])
```

Out[48]:
```
([<matplotlib.patches.Wedge at 0x2880bd1f130>,
  <matplotlib.patches.Wedge at 0x2880bd1f040>,
  <matplotlib.patches.Wedge at 0x2880bd1f8b0>,
  <matplotlib.patches.Wedge at 0x2880bd1fc40>,
  <matplotlib.patches.Wedge at 0x2880bd54100>,
  <matplotlib.patches.Wedge at 0x2880bd54580>,
  <matplotlib.patches.Wedge at 0x2880bd54a00>,
  <matplotlib.patches.Wedge at 0x2880bd54e80>,
  <matplotlib.patches.Wedge at 0x2880bd55300>,
  <matplotlib.patches.Wedge at 0x2880bd55780>,
  <matplotlib.patches.Wedge at 0x2880bd1f100>,
  <matplotlib.patches.Wedge at 0x2880bc9e920>,
  <matplotlib.patches.Wedge at 0x2880bd561d0>,
  <matplotlib.patches.Wedge at 0x2880bd56650>,
  <matplotlib.patches.Wedge at 0x2880bd56ad0>],
 [Text(1.0835929901636139, 0.18927818592822157, 'Northland'),
  Text(0.9045889797341116, 0.6258744105198737, 'Auckland'),
  Text(0.559126617711661, 0.9473000714484922, 'Waikato'),
  Text(0.07919171389160112, 1.0971456933565893, 'Bay of Plenty'),
  Text(-0.5591267618371843, 0.9472999863810116, 'Gisborne'),
  Text(-0.9705800980558458, 0.5176623158564906, "Hawke's Bay"),
  Text(-1.09817296362616, 0.06337303811982761, 'Taranaki'),
  Text(-1.045178062508243, -0.3429326721843746, 'Manawatu-Whanganui'),
  Text(-0.8265880130033877, -0.7257770020874948, 'Wellington'),
  Text(-0.44644447610305893, -1.005329463289058, 'Tasman'),
  Text(0.2359338185497483, -1.0743999410203513, 'Nelson'),
  Text(0.6643855869095172, -0.8766936705069203, 'Marlborough'),
  Text(0.6643855869095172, -0.8766936705069203, 'West Coast'),
  Text(0.867028804554933, -0.6769498150321367, 'Canterbury'),
  Text(1.0776883875940724, -0.22042626713912508, 'Otago')])
```



In [ ]: