In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from sklearn.metrics import classification_report
from sklearn.preprocessing import StandardScaler
from sklearn.linear_model import LogisticRegression
```

In [2]:
```
df=pd.read_csv("HRDataset_v14.csv")
```

In [3]:
```
df
```

Out[3]:

	Employee_Name	EmpID	MarriedID	MaritalStatusID	GenderID	EmpStatusID	DeptID	PerfScoreID	FromDiver
0	Adinolfi, Wilson K	10026	0	0	1	1	5	4	
1	Ait Sidi, Karthikeyan	10084	1	1	1	5	3	3	
2	Akinkuolie, Sarah	10196	1	1	0	5	5	3	
3	Alagbe,Trina	10088	1	1	0	1	5	3	
4	Anderson, Carol	10069	0	2	0	5	5	3	
...	...	...	...	...	...	...	...	...	
306	Woodson, Jason	10135	0	0	1	1	5	3	
307	Ybarra, Catherine	10301	0	0	0	5	5	1	
308	Zamora, Jennifer	10010	0	0	0	1	3	4	
309	Zhou, Julia	10043	0	0	0	1	3	3	
310	Zima, Colleen	10271	0	4	0	1	5	3	

311 rows × 36 columns

In [ ]:
```
```

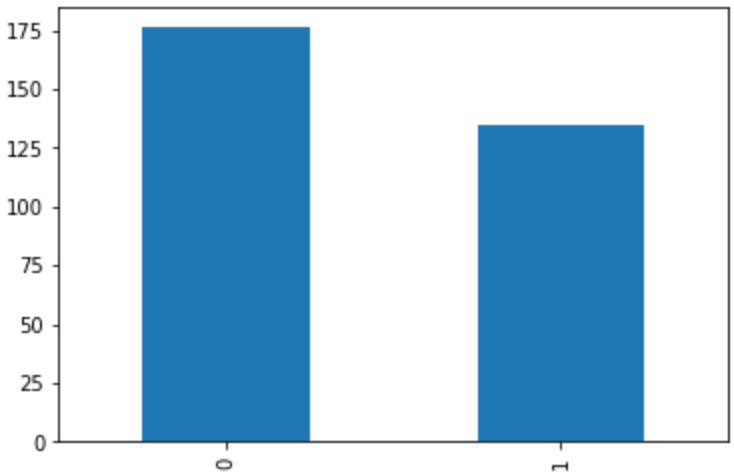
In [4]:
```
df["RecruitmentSource"].value_counts().plot(kind="pie")
plt.show()
```

In [5]:
```
```

```
df["MarriedID"].value_counts()
#not_married 187
#married 124
```

Out[5]:
```
0    187
1    124
Name: MarriedID, dtype: int64
```

In [6]:
```
df["GenderID"].value_counts().plot(kind="bar")
plt.show()
# 0 represent the male
# 1 represent the female
```



In [7]:
```
df=pd.read_csv("HR_comma_sep.csv")
```

In [8]:
```
df
```

Out[8]:

	satisfaction_level	last_evaluation	number_project	average_montly_hours	time_spend_company	Work_acciden
0	0.38	0.53	2	157	3	
1	0.80	0.86	5	262	6	
2	0.11	0.88	7	272	4	
3	0.72	0.87	5	223	5	
4	0.37	0.52	2	159	3	
...	...	...	...	...	...	
14994	0.40	0.57	2	151	3	
14995	0.37	0.48	2	160	3	
14996	0.37	0.53	2	143	3	
14997	0.11	0.96	6	280	4	
14998	0.37	0.52	2	158	3	

14999 rows × 10 columns

In [9]:
```
df.pop('satisfaction_level')
```

Out[9]:
```
0        0.38
```

```
1         0.80
2         0.11
3         0.72
4         0.37
          ...
14994     0.40
14995     0.37
14996     0.37
14997     0.11
14998     0.37
Name: satisfaction_level, Length: 14999, dtype: float64
```

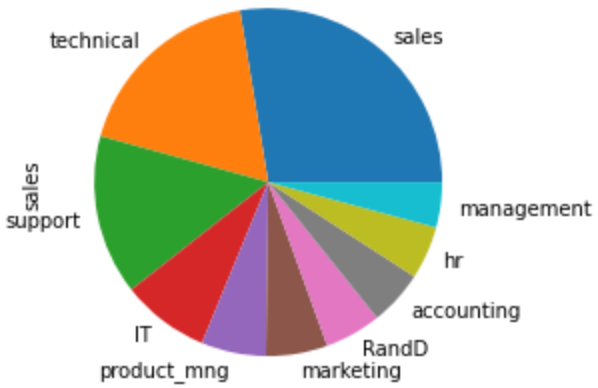
In [10]:
```
df
```

Out[10]:

	last_evaluation	number_project	average_montly_hours	time_spend_company	Work_accident	left	promotion
0	0.53	2	157	3	0	1	
1	0.86	5	262	6	0	1	
2	0.88	7	272	4	0	1	
3	0.87	5	223	5	0	1	
4	0.52	2	159	3	0	1	
...	...	...	...	...	...	...	
14994	0.57	2	151	3	0	1	
14995	0.48	2	160	3	0	1	
14996	0.53	2	143	3	0	1	
14997	0.96	6	280	4	0	1	
14998	0.52	2	158	3	0	1	

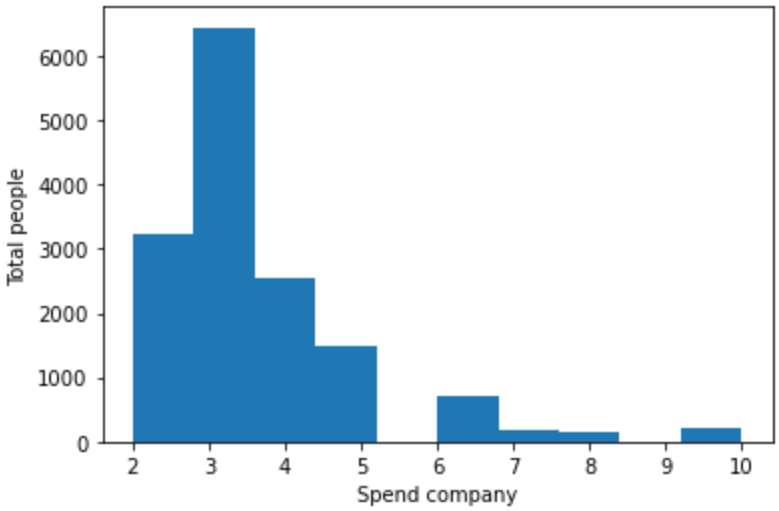
14999 rows × 9 columns

In [11]:
```
df["sales"].value_counts().plot(kind="pie")
plt.show()
```



In [12]:
```
plt.hist(df['time_spend_company'])
plt.xlabel("Spend company")
plt.ylabel("Total people")
```

Out[12]:
```
Text(0, 0.5, 'Total people')
```


6000
5000
4000
3000
2000
1000
0
Total people
2
3
4
5
6
7
8
9
10
Spend company

In [ ]: