

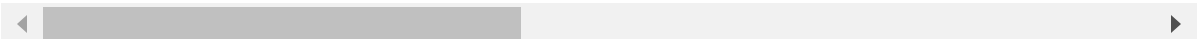
```
In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [2]: visa_df=pd.read_csv(r"C:\Users\abhis\OneDrive\Documents\Narash it\data files folder\visa_df")
```

```
Out[2]:
```

	case_id	continent	education_of_employee	has_job_experience	requires_job_train
0	EZYV01	Asia	High School	N	
1	EZYV02	Asia	Master's	Y	
2	EZYV03	Asia	Bachelor's	N	
3	EZYV04	Asia	Bachelor's	N	
4	EZYV05	Africa	Master's	Y	
...
25475	EZYV25476	Asia	Bachelor's	Y	
25476	EZYV25477	Asia	High School	Y	
25477	EZYV25478	Asia	Master's	Y	
25478	EZYV25479	Asia	Master's	Y	
25479	EZYV25480	Asia	Bachelor's	Y	

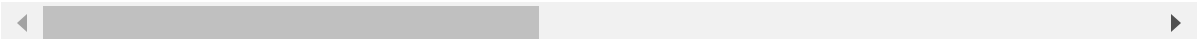
25480 rows × 12 columns



```
In [3]: visa_df.head(6)
```

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Out[3]:
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	case_id	continent	education_of_employee	has_job_experience	requires_job_training	no
0	EZYV01	Asia	High School	N		N
1	EZYV02	Asia	Master's	Y		N
2	EZYV03	Asia	Bachelor's	N		Y
3	EZYV04	Asia	Bachelor's	N		N
4	EZYV05	Africa	Master's	Y		N
5	EZYV06	Asia	Master's	Y		N



```
In [4]: visa_df['no_of_employees']
```

```
Out[4]: 0      14513
        1      2412
        2     44444
        3       98
        4     1082
        ...
        25475    2601
        25476    3274
        25477    1121
        25478    1918
        25479    3195
        Name: no_of_employees, Length: 25480, dtype: int64
```

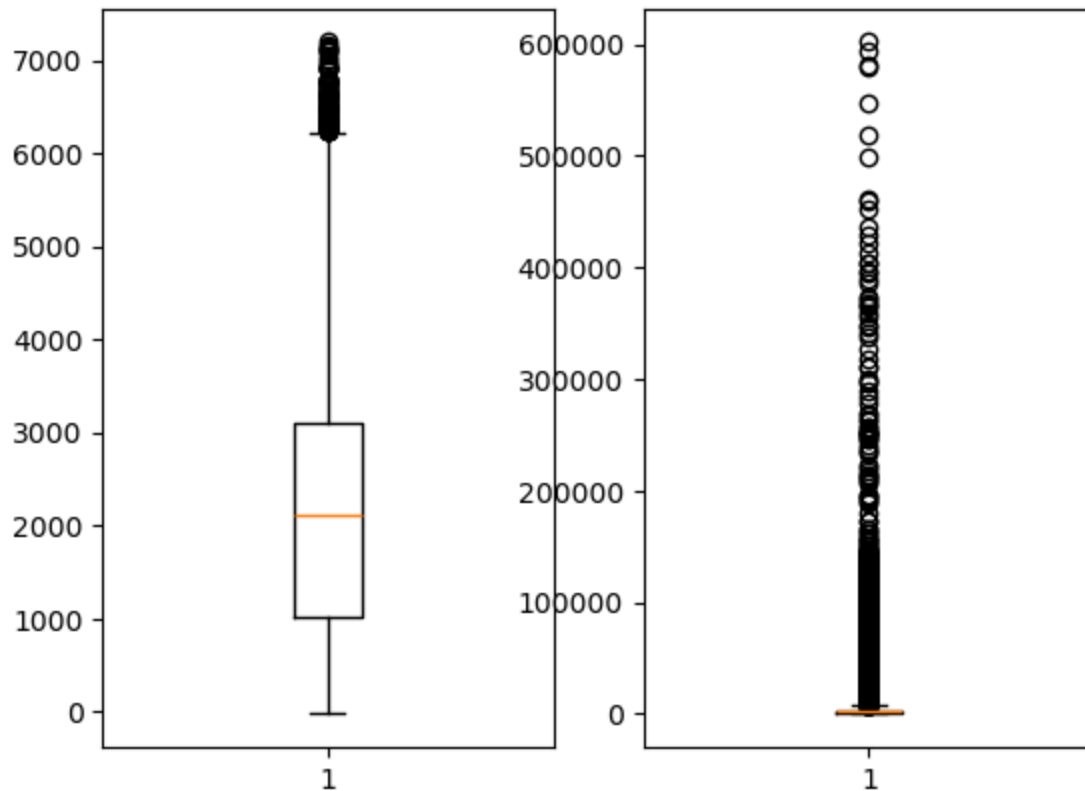
```
In [5]: len(visa_df['no_of_employees'])
```

```
Out[5]: 25480
```

```
In [6]: Q1=round(np.percentile(visa_df['no_of_employees'],25),2)
        Q3=round(np.percentile(visa_df['no_of_employees'],75),2)
        IQR=Q3-Q1
        LB=Q1-1.5*IQR
        UB=Q3+1.5*IQR
        con1=visa_df['no_of_employees']<LB
        con2=visa_df['no_of_employees']>UB
        outliers_data=visa_df[con1 | con2]
        len(outliers_data)
```

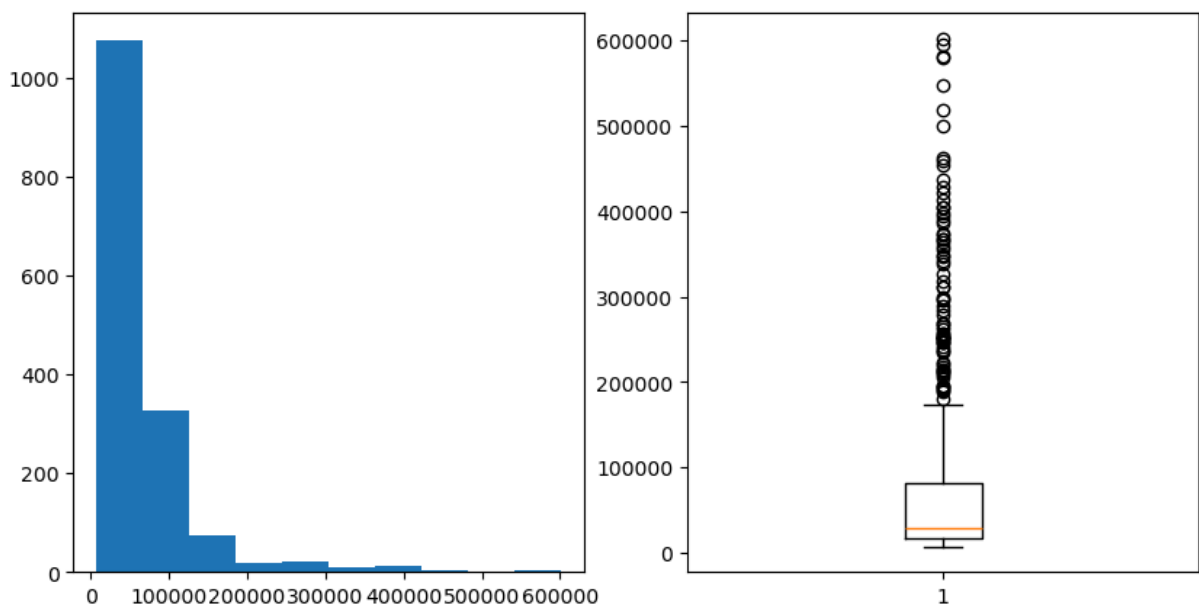
```
Out[6]: 1556
```

```
In [8]: l1=[]
        median = visa_df['no_of_employees'].median()
        for value in visa_df['no_of_employees'].values:
            if value < LB or value > UB:
                l1.append(median)
            else:
                l1.append(value)
        visa_df_copy=visa_df.copy()
        visa_df_copy['no_of_employees']=l1
        plt.subplot(1,2,1).boxplot(visa_df_copy['no_of_employees'])
        plt.subplot(1,2,2).boxplot(visa_df['no_of_employees'])
        plt.show()
```

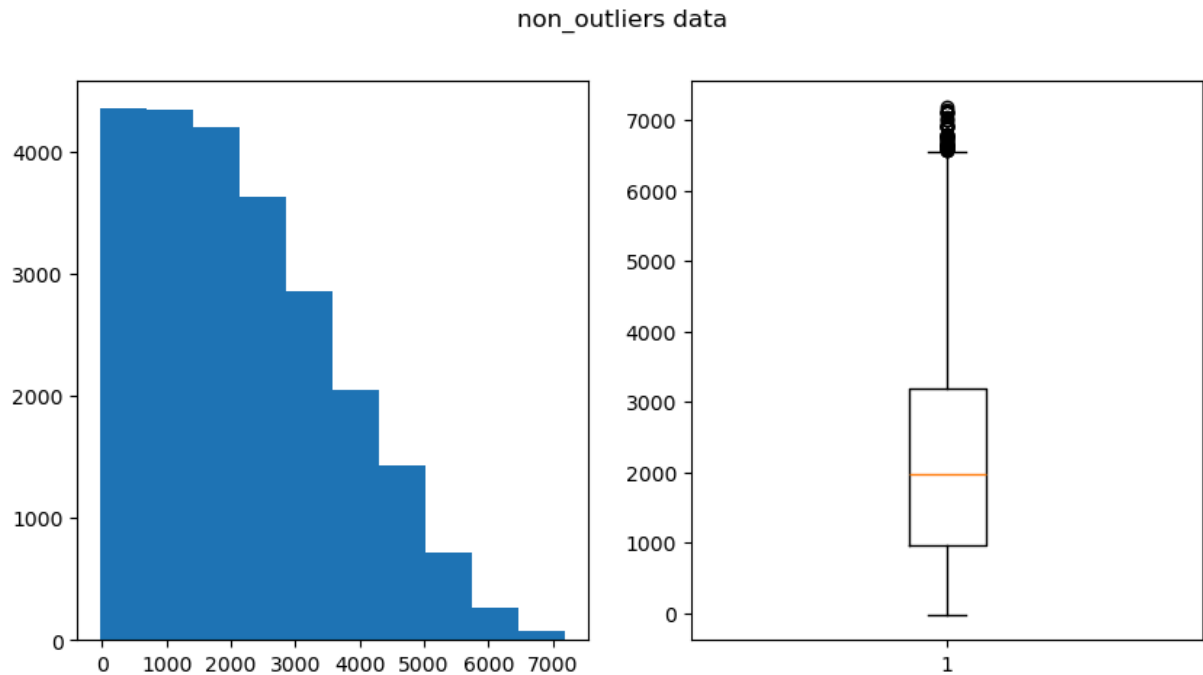


```
In [9]: con1=visa_df['no_of_employees']<LB
con2=visa_df['no_of_employees']>UB
outliers_data=visa_df[con1 | con2]
len(outliers_data)
plt.figure(figsize=(10,5))
plt.suptitle(' outliers data')
plt.subplot(1,2,1).hist(outliers_data['no_of_employees'])
plt.subplot(1,2,2).boxplot(outliers_data['no_of_employees'])
plt.show()
```

outliers data



```
In [10]: con3=visa_df['no_of_employees']>LB
con4=visa_df['no_of_employees']<UB
non_outliers_data=visa_df[con3 & con4]
len(non_outliers_data)
plt.figure(figsize=(10,5))
plt.suptitle('non_outliers data')
plt.subplot(1,2,1).hist(non_outliers_data['no_of_employees'])
plt.subplot(1,2,2).boxplot(non_outliers_data['no_of_employees'])
plt.show()
```



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