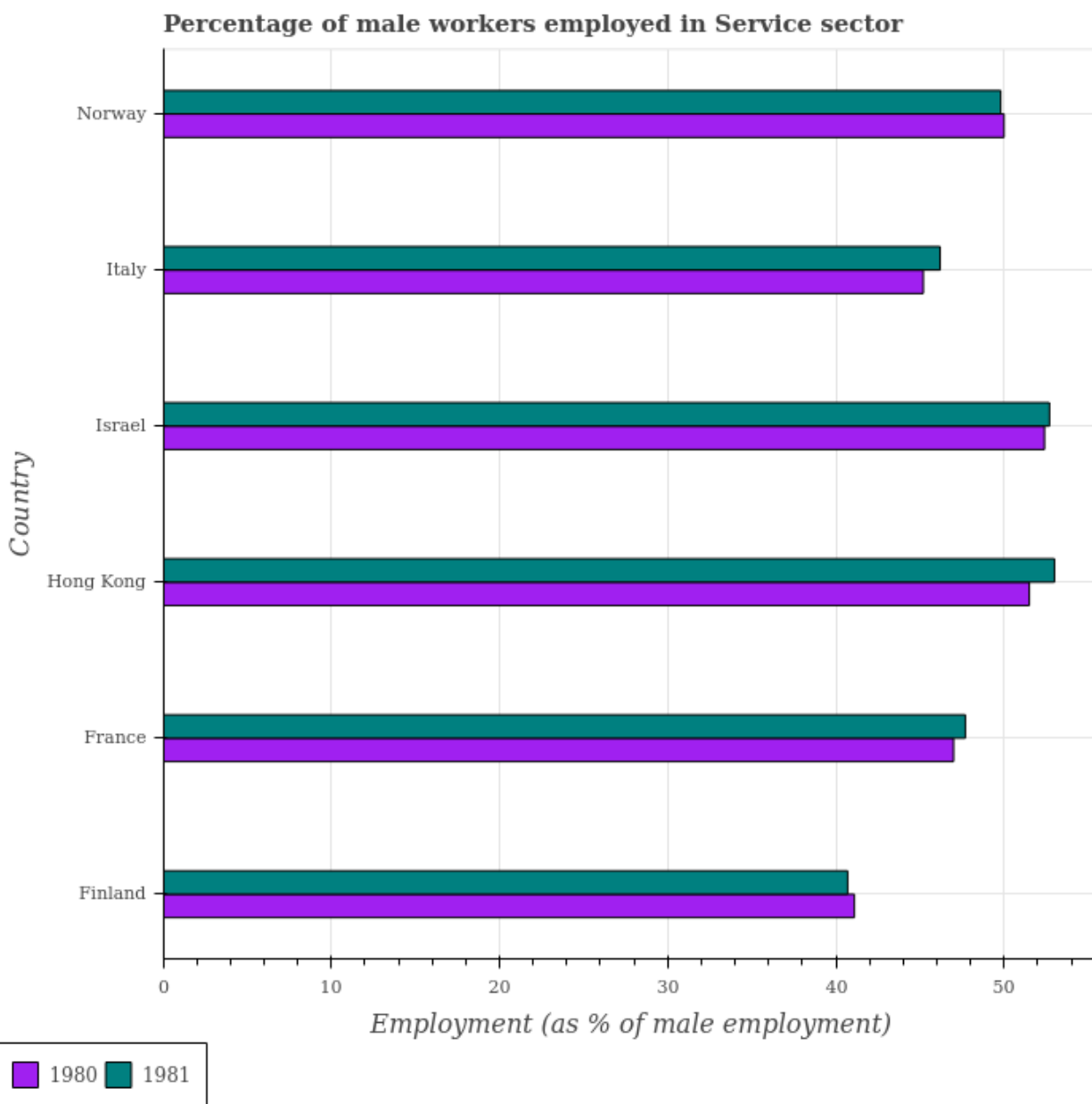


## Complete List of Types of Questions Addressed

Example Image: (Grouped Horizontal Bar Graph)



### CSV Output:

	Country	1980	1981
0	Israel	54.191570	54.512780
1	France	48.970106	48.401403
2	Finland	41.569151	41.217884
3	Norway	51.488818	51.018932
4	Italy	46.373521	46.332053
5	Hong Kong	53.624025	54.126604

### Types of questions addressed:

1. Count

Q: what are the total number of countries

A: 6

2. Sum

Q: what is the total number of male workers employed in 1980

A: 296.2171903097152

3. Average

Q: what is the average number of male workers in the year 1980

A: 49.36953171828586

Q: what is the average number of male workers in the year 1981

A: 49.26827598218275

4. Minimum

Q: across all countries, what is the minimum percentage of male workers employed in service sector in 1980

A: 41.56915064054187

5. Maximum

Q: across all countries, what is the maximum percentage of male workers employed in service sector in 1980

A: 54.191569798758344

## 6. Difference

Q: what is the difference between the average number of male workers employed for the year 1980 and 1981

A: DIFFERENCE = 0.10125573610311278

Q: what is the difference between the number of male worker employed for the country france in 1980 and 1981

A: DIFFERENCE = 0.5687026318456105

- Keyword = "difference between"
- The two entities must be separated by "and"

## 7. Median

Q: what is the median number of male workers employed in the year 1980

A: MEDIAN = 50.22946206732409

- Keyword = "median"
- Column name for which the median has to be found

## 8. Ratio

Q: what is the ratio of male workers employed in 1981 to 1980 for the country hong kong

A: RATIO = 1.0093722657385955

- Keyword = "Ratio"
- QUANTITY\_1 "to" QUANTITY\_2

## 9. Trend (Increasing or Decreasing)

Q: what is the trend of male workers employed for the countries finland, france, hong kong in 1980

A: TREND = INCREASING

Q: what is the trend of male workers employed for the countries israel, italy in 1980

A: TREND = DECREASING

Q: what is the trend of male workers employed for the countries israel, italy, norway in 1980

A: TREND = NONE

- Keyword = "trend"
- List of comma separated entries followed by "in" COL\_NAME

## 10. Selection operation on cell

Q: what is the number of male workers employed for country france in the year 1981

A: 48.40140328049439

11. Select operation on cell after applying aggregation operation

Q: which country has the minimum number of male workers employed in the year 1981

A: Finland

12. Selection and Aggregation operation on subset of rows

Q: what is the sum of male workers employed for the countries france, finland in the year 1980

A: 90.53925655288188

Q: what is the average number of male workers employed for the countries france, finland in the year 1980

A: 45.26962827644094

Q: what is the maximum number of male workers employed for the countries france, finland in the year 1980

A: 48.97010591234

13. Project operation on column

Q: what are the names all the countries

A: Finland, France, Hong Kong, Israel, Italy, Norway

Q: list out the countries

A: Finland, France, Hong Kong, Israel, Italy, Norway

14. Range

Q: what is the range of % of male employment for the year 1980

A: RANGE = 12.622419158216474

15. Quartiles (Q1 and Q3) and

Q: find the quartiles for the year 1980

A: FIRST QUARTILE (Q1) = 43.97133559037385

SECOND QUARTILE (Q2) = 50.22946206732409

THIRD QUARTILE (Q3) = 53.90779749715967

16. IQR

Q: find the interquartile range for the year 1980

A: INTER-QUARTILE RANGE = 9.936461906785823

17. Structural Query

Q: what is the title of the graph ?

A: TITLE OF THE GRAPH = Percentage of male workers employed in Service se

Q: what is the label or title of the x-axis ?

A: X-LABEL = Employment (03 % of male employment)

Q: what is the label or title of the y-axis ?

A: Y-LABEL = Country

18. YES / NO

Q: in the year 1981, hong kong has the highest employment percentage.

A: YES

Q: for the year 1980, italy has a lower employment percentage than norway.

A: YES

Q: the average employment rate of hong kong is greater than the average employment rate of finland.

A: YES

Q: is the percentage of male workers employed in service sector in 1980 in italy less than that in norway ?

A: YES