

# REPORT

## Shape

(1338, 7)

## Names of the Columns

Index(['age', 'sex', 'bmi', 'children', 'smoker', 'region', 'charges'], dtype='object')

## Information

<class 'pandas.core.frame.DataFrame'>

RangeIndex: 1338 entries, 0 to 1337

Data columns (total 7 columns):

age 1338 non-null int64

sex 1338 non-null object

bmi 1338 non-null float64

children 1338 non-null int64

smoker 1338 non-null object

region 1338 non-null object

charges 1338 non-null float64

dtypes: float64(2), int64(2), object(3)

memory usage: 73.3+ KB

## Statistical Description

	age	bmi	children	charges
count	1338.000000	1338.000000	1338.000000	1338.000000
mean	39.207025	30.663397	1.094918	13270.422265
std	14.049960	6.098187	1.205493	12110.011237
min	18.000000	15.960000	0.000000	1121.873900
25%	27.000000	26.296250	0.000000	4740.287150
50%	39.000000	30.400000	1.000000	9382.033000
75%	51.000000	34.693750	2.000000	16639.912515
max	64.000000	53.130000	5.000000	63770.428010

## *Types of Instances*

18 69

19 68

51 29

45 29

46 29

47 29

48 29

50 29

52 29

20 29

26 28

54 28

53 28

25 28

24 28

49 28

23 28

22 28

21 28

27 28

28 28

31 27

29 27

30 27

41 27

43 27

44 27

40 27

42 27

57 26

34 26

33 26

32 26

56 26

55 26

59 25

58 25

39 25

38 25

35 25

36 25

37 25

63 23

60 23

61 23

62 23

64 22

*Name: age, dtype: int64*

male 676

female 662

*Name: sex, dtype: int64*

32.300 13

28.310 9

31.350 8

30.800 8

30.875 8

..

20.100 1

29.545 1

37.900 1

25.520 1

24.090 1

Name: bmi, Length: 548, dtype: int64

0 574

1 324

2 240

3 157

4 25

5 18

Name: children, dtype: int64

no 1064

yes 274

Name: smoker, dtype: int64

southeast 364

southwest 325

northwest 325

northeast 324

Name: region, dtype: int64

1639.56310 2

8825.08600 1

43254.41795 1

5257.50795 1

1980.07000 1

..

12269.68865 1

6360.99360 1

7371.77200 1

16420.49455 1

34254.05335 1

Name: charges, Length: 1337, dtype: int64

**Correlation matrix**

age      bmi children charges

age      1.000000 0.109272 0.042469 0.299008

bmi      0.109272 1.000000 0.012759 0.198341

children 0.042469 0.012759 1.000000 0.067998

charges 0.299008 0.198341 0.067998 1.000000