Topic: US.Regional Analysis of Medical Insurance cost

Files: CIS41_Project

Name : Tayyaba Fatima

**Tasks: EDA - pivot table, groupby table, countplot, histogram, FacetGrid, Regplot, pairplot, Implot, iplot or plotly, boxplot, violinplot, barplot, countplot, swarmplot, heatmap, ECDF Hypothesis Testing -ANOVA, Chi-squared, Normal-Test, pearson-correlation-coefficient, Z-Test Conclusion (findings) Summary:

- 1. This is a data of 1338 people for medical insurance in which most of them have age below 20.
- 2. Female smoke less than the male
- 3. There are more young males than young females whereas there are more old female than young male
- 4. If a person is smoker then their charges increased as smoking is positively correlated with the charges.
- 5. South east region have maximum number of people who smoke where as Northeast have less smokers out of 4 regions.
- 6. South east region have maximum people with 0 children.
- 7. South east region have 0 people with 5 children. That mean this region have more young people.
- 8. Children and charges have weak relationship.
- 9. People who have no children smokes more may be that's why there charges are more
- 10. BMI and Age have little effect on charges as it has weak strong relationship with charges.
- 11. Charges and sex have negative relationship.
- 12. The data shows that having more children does'nt increase charges.
- 13. People who have no children smokes more may be that's why there charges are more
- 14. 70% percent charges are between 10,000 to 20,000 in all the regions
- 15. Out of All the four regions South east people have more charges.