Project Title: Risk and prevention of suicide

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Project Description/Outline

Our group is investigating the most common risk factors associated with attempting suicide, and how to prevent it if applicable. Looking at the data we hope to determine which groups are most likely to attempt based on the risk factors associated with them. We also hope to determine if access to resources is likely to reduce the probability of suicide attempts.

Research Questions to Answer

1. Who is more likely to attempt suicide?
2. Which gender is more likely to attempt suicide?
3. Which race/culture is more likely to attempt suicide?
4. What are the most common risk factors associated with attempting suicide?
5. Are the risk factors more likely to impact one group over another group?
   * 1. Poverty
     2. Education
     3. Family history
     4. Genetics
     5. Drug abuse.
     6. Military background
     7. Trans and LGBTQ community
6. Does access to resources and aid help prevent the high probability of suicide?

Datasets to be Used

1. <https://catalog.data.gov/dataset/death-rates-for-suicide-by-sex-race-hispanic-origin-and-age-united-states-020c1/resource/e1d8e368-2a1b-488a-a7cc-6953439fc3af>
2. <https://www.enterpriseappstoday.com/stats/suicide-statistics.html#Causes_of_Suicide>
3. [Gender differentiation in methods of suicide attempts - PMC (nih.gov)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3539603/)
4. <https://www.ncbi.nlm.nih.gov/books/NBK441982/#article-34532.s15>
5. <https://data.world/samhsa/serious-thoughts-of-suicide>
6. <https://www.statista.com/statistics/1053024/lgbtq-youth-in-us-attempted-suicide-conversion-therapy-experience/>
7. <https://catalog.data.gov/dataset/monthly-counts-of-deaths-by-select-causes-2014-2019-da9df>
8. <https://www.ajpmonline.org/article/S0749-3797(18)31677-5/fulltext>
9. <https://www.cdc.gov/surveillance/blogs-stories/Suicide-Trends.html>
10. <https://catalog.data.gov/dataset/unintentional-drug-overdose-death-rate-by-race-ethnicity>
11. <https://ourworldindata.org/suicide>
12. <https://www.kaggle.com/datasets/russellyates88/suicide-rates-overview-1985-to-2016>
13. <https://catalog.data.gov/dataset/intimate-partner-homicide-suicide-in-new-york-city-2010-2018>
14. <https://catalog.data.gov/dataset/early-model-based-provisional-estimates-of-drug-overdose-suicide-and-transportation-relate-b35b2>
15. <https://www.cdc.gov/suicide/facts/disparities-in-suicide.html>

Rough Breakdown of Tasks

Madeline, Linet, Jesse

1. Research [data exploration and clean up]
2. Read and Merge datasets
3. Data visualization
   1. Create bars, pie, and scatter plots if necessary.
   2. Utilize Matplotlib, and NumPy
4. Write, Clean, and debug code
5. Data analysis
6. Create PowerPoint presentation