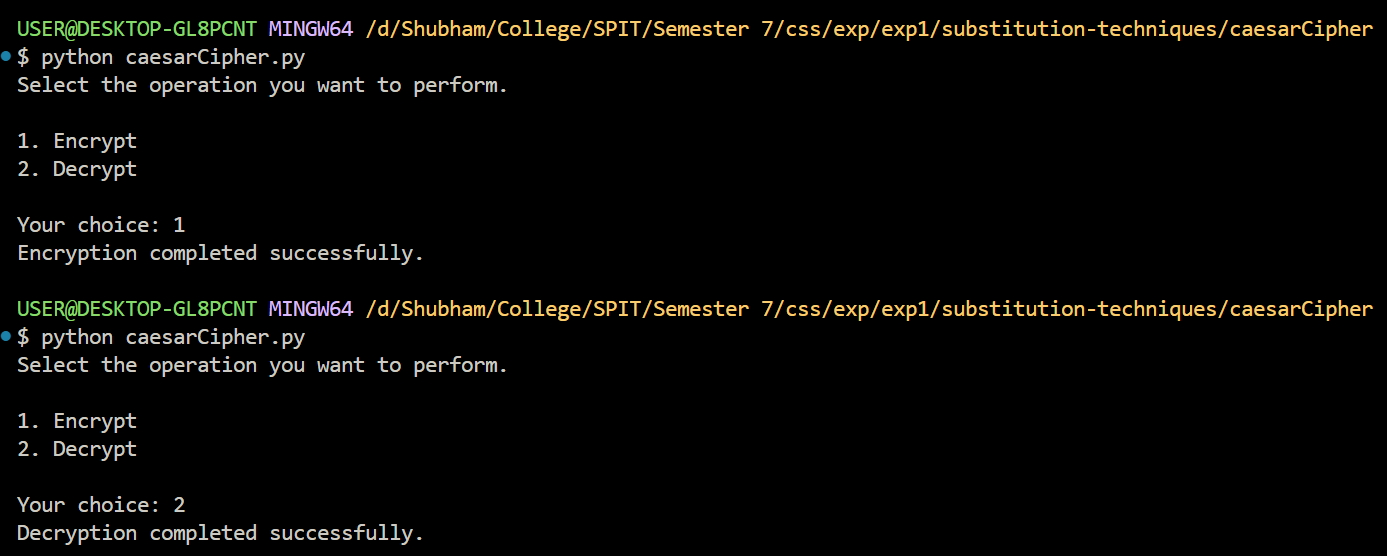
| Name | Shubham Solanki |
| --- | --- |
| UID | 2022301015 |
| Experiment number | 1 |
| Title | Implement different substitution techniques |
| Batch | VIII (Comps A) |

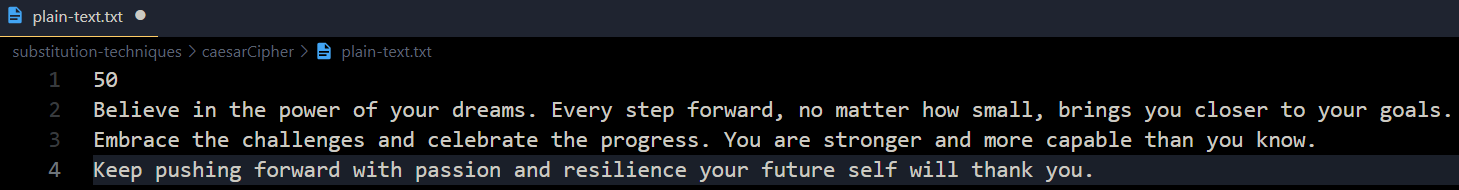
**1.Caesar Cipher**

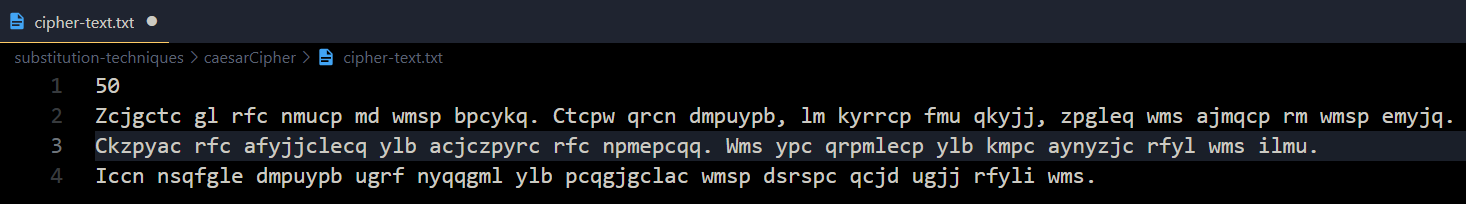
**Plain text -** Believe in the power of your dreams. Every step forward, no matter how small, brings you closer to your goals. Embrace the challenges and celebrate the progress. You are stronger and more capable than you know. Keep pushing forward with passion and resilience—your future self will thank you.

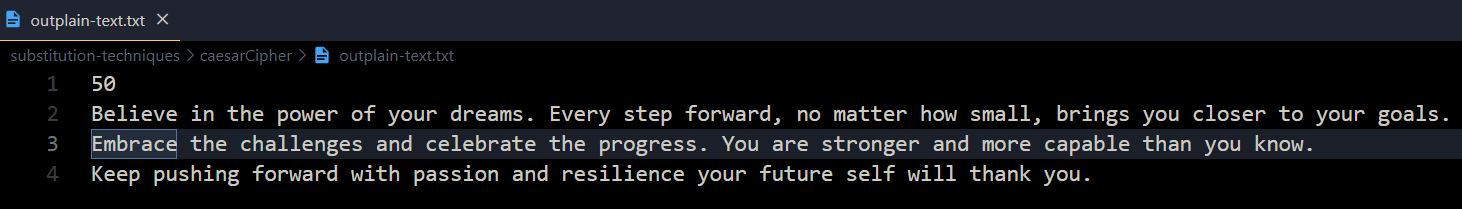
**Cipher text -** Zcjgctc gl rfc nmucp md wmsp bpcykq. Ctcpw qrcn dmpuypb, lm kyrrcp fmu qkyjj, zpgleq wms ajmqcp rm wmsp emyjq. Ckzpyac rfc afyjjclecq ylb acjczpyrc rfc npmepcqq. Wms ypc qrpmlecp ylb kmpc aynyzjc rfyl wms ilmu. Iccn nsqfgle dmpuypb ugrf nyqqgml ylb pcqgjgclac wmsp dsrspc qcjd ugjj rfyli wms.

**Key -** 50

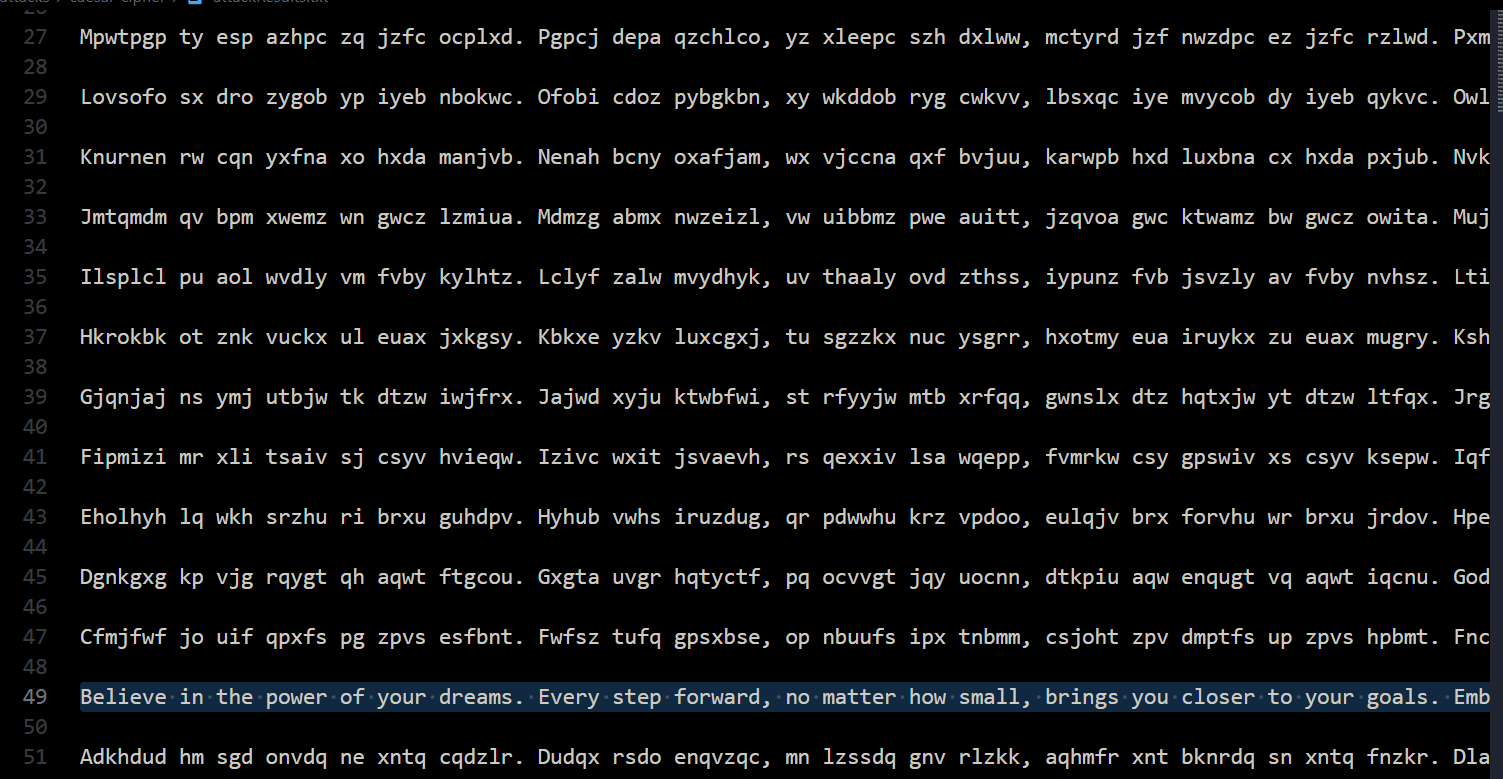








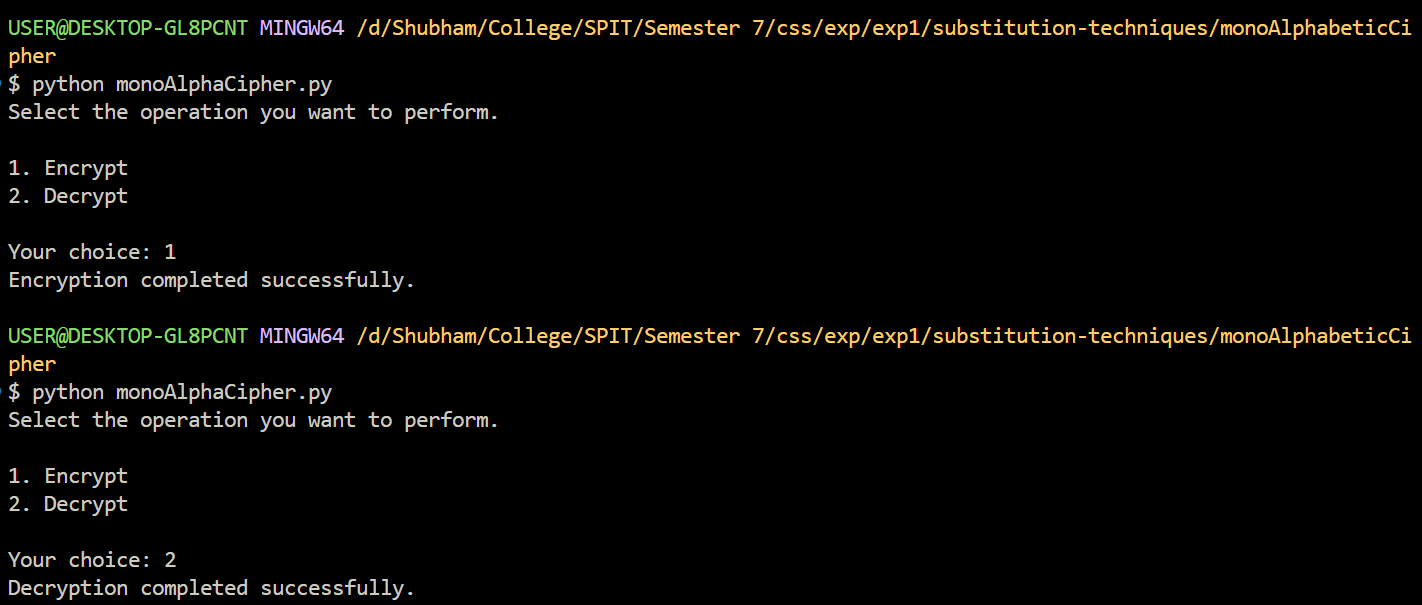
**Attack**

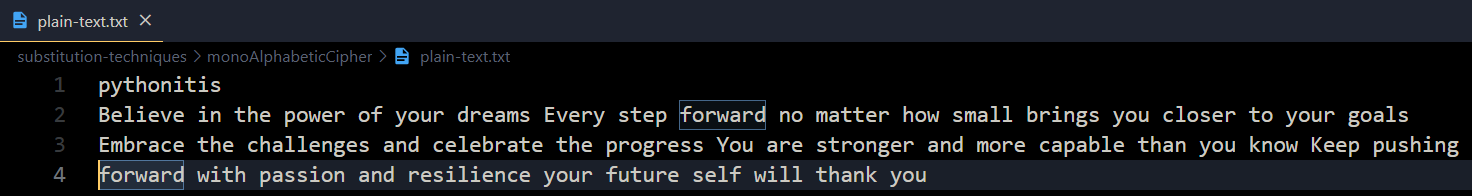


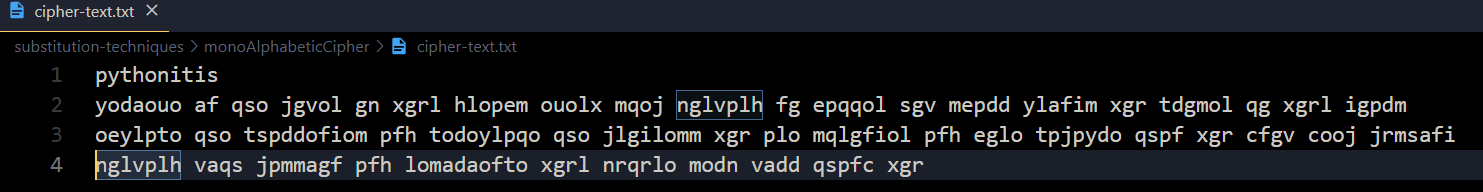
**2.Monoalphabetic cipher**

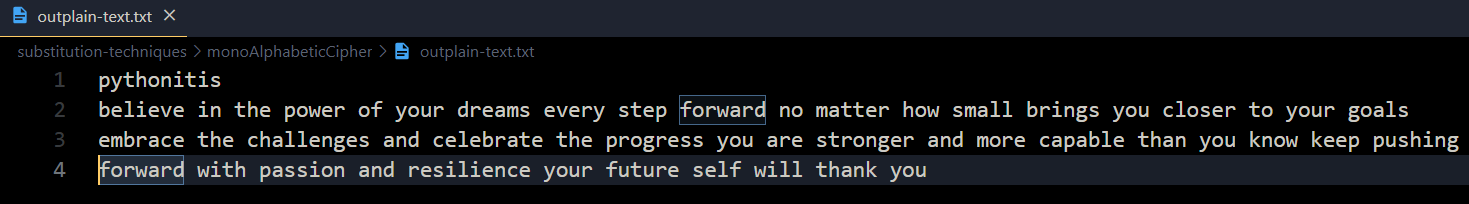
**Plain text -** Believe in the power of your dreams Every step forward no matter how small brings you closer to your goals Embrace the challenges and celebrate the progress You are stronger and more capable than you know Keep pushing forward with passion and resilience your future self will thank you

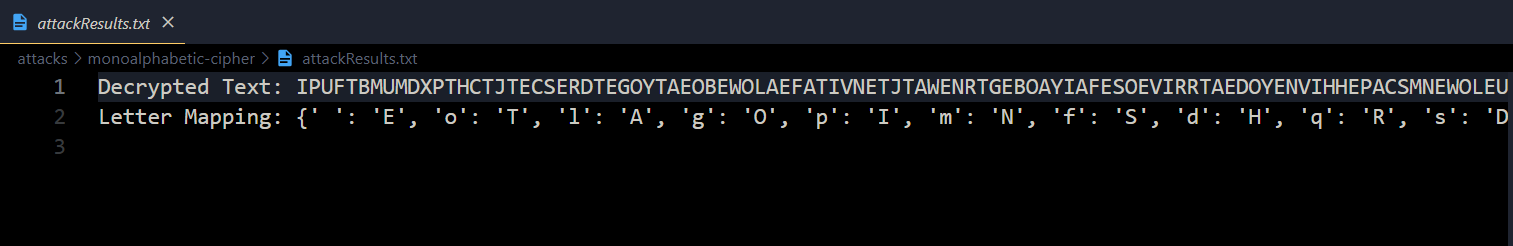
**Cipher text -** SGVDDWDSSPTFYPTMZBDHPZLGMGSQEMWDLOESCTGHMZBQCITRSHSMQOTZEWIQRILBBCITPZDKTBGMHPTPZKRBIQEMRSQBDFHOFDAFQVMDBCMEBIEDDMGSQBSMHOCTZBRZMEITPZBQMEOMPBCFQBICRTMGFNHNIRMSAFIPPZUCTZMCCTNPATSICGBZXSLGVSHOHNAWASPBBIGLMEDVSDCKDTPZQGWPZKMEDMEXDVMYAFCUTPVZ

**Key -** pythonitis ****

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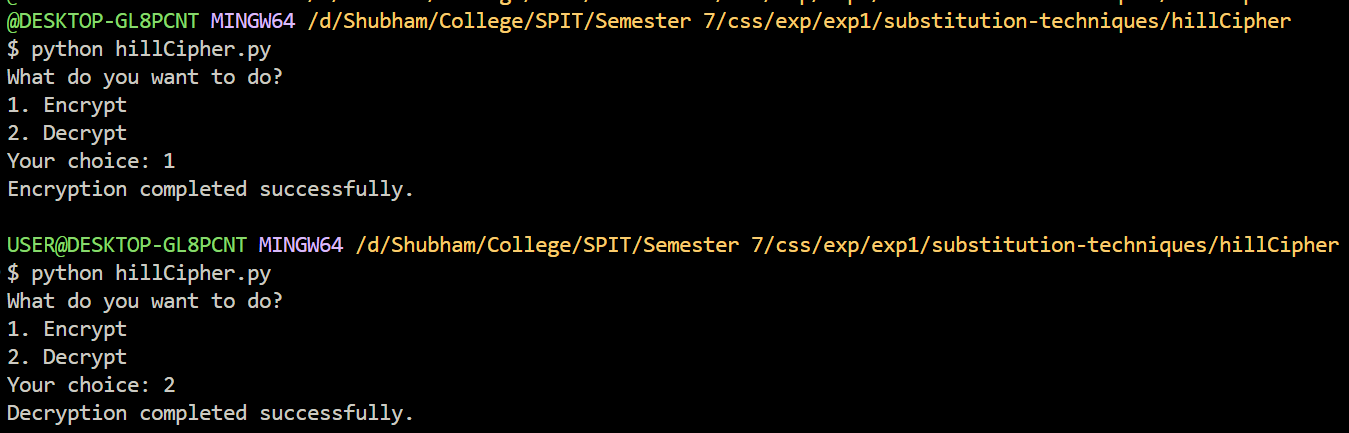
**Attack**  


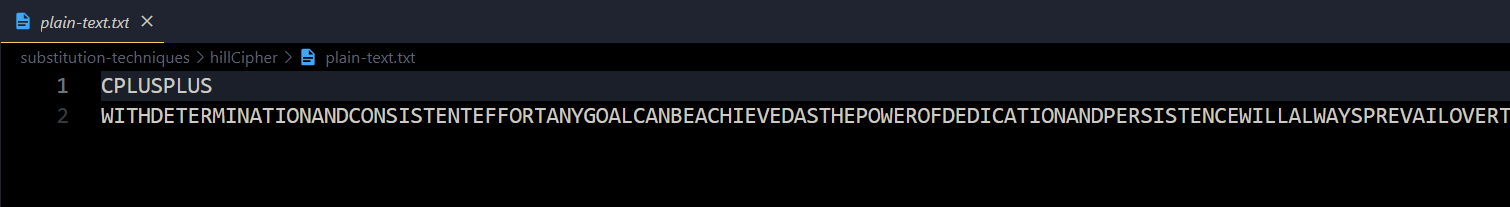
**3. Hill Cipher**

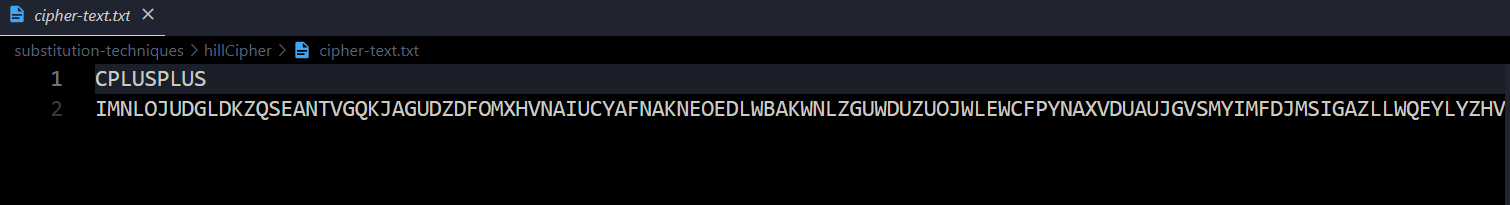
**Plain text -** WITHDETERMINATIONANDCONSISTENTEFFORTANYGOALCANBEACHIEVEDASTHEPOWEROFDEDICATIONANDPERSISTENCEWILLALWAYSPREVAILOVERTHEOBSTACLESANDDOUBTSWHICHTRYTOHOLDYOUBACKFROMREACHINGYOURFULLESTPOTENTIAL

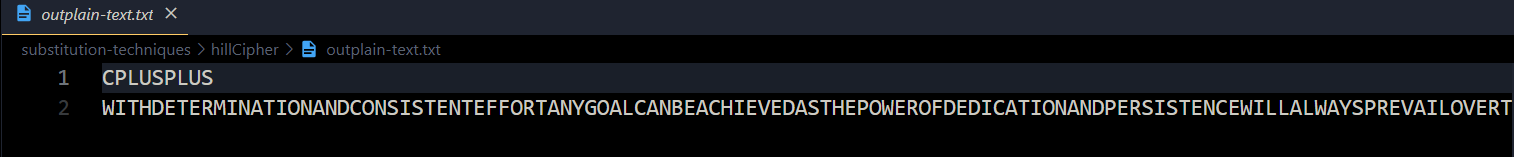
**Cipher text -** IMNLOJUDGLDKZQSEANTVGQKJAGUDZDFOMXHVNAIUCYAFNAKNEOEDLWBAKWNLZGUWDUZUOJWLEWCFPYNAXVDUAUJGVSMYIMFDJMSIGAZLLWQEYLYZHVWBRSJGEOETKQTVIBDGWXTSUYNPEROVQTPZYYDGEORCKZTEISFGDKIAQIFBXYETJGGDUDZDQKWR

**Key -** CPLUSPLUS

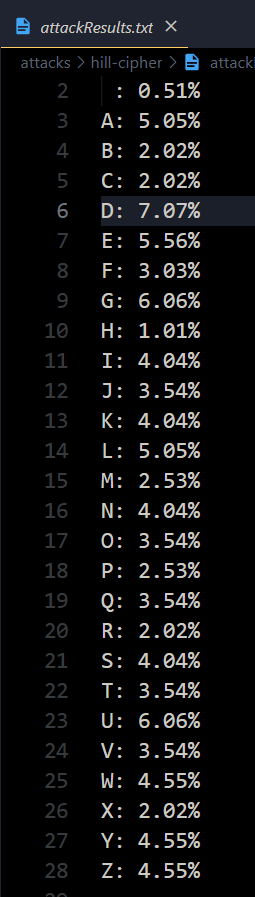








**Attack -**

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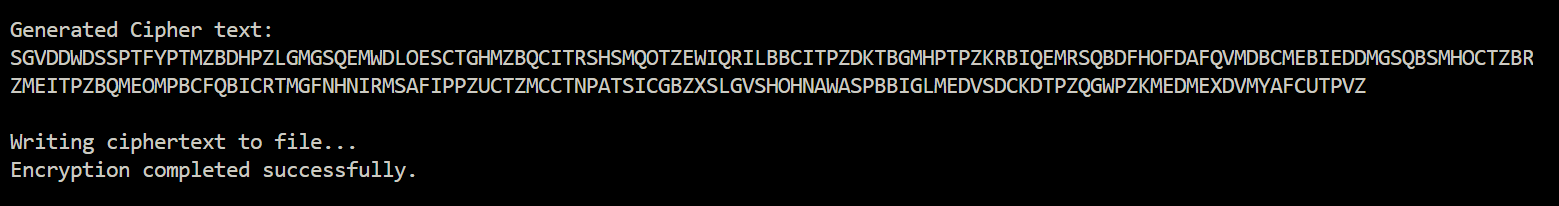
**4. PolyAlphabetic Cipher**

**Plain text -** BELIEVE IN THE POWER OF YOUR DREAMS EVERY STEP FORWARD NO MATTER HOW SMALL BRINGS YOU CLOSER TO YOUR GOALS EMBRACE THE CHALLENGES AND CELEBRATE THE PROGRESS YOU ARE STRONGER AND MORE CAPABLE THAN YOU KNOW KEEP PUSHING FORWARD WITH PASSION AND RESILIENCE YOUR FUTURE SELF WILL THANK YOU

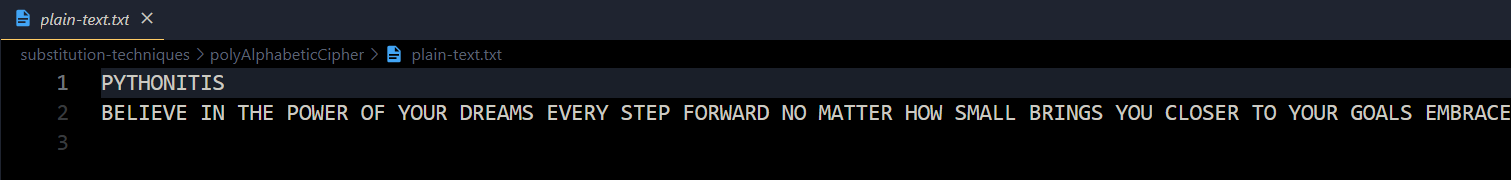
**Cipher text -** SGVDDWDSSPTFYPTMZBDHPZLGMGSQEMWDLOESCTGHMZBQCITRSHSMQOTZEWIQRILBBCITPZDKTBGMHPTPZKRBIQEMRSQBDFHOFDAFQVMDBCMEBIEDDMGSQBSMHOCTZBRZMEITPZBQMEOMPBCFQBICRTMGFNHNIRMSAFIPPZUCTZMCCTNPATSICGBZXSLGVSHOHNAWASPBBIGLMEDVSDCKDTPZQGWPZKMEDMEXDVMYAFCUTPVZ

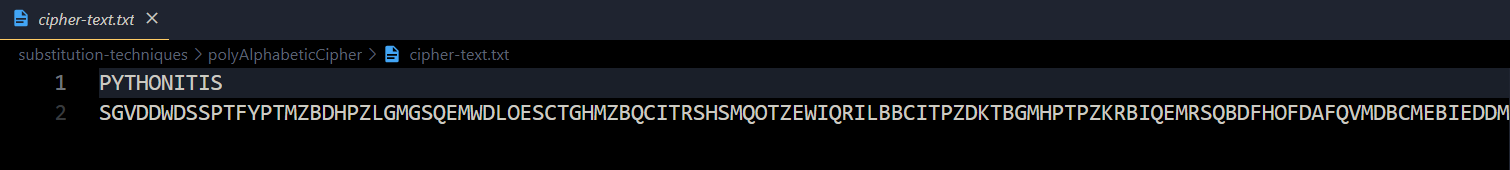
**Key -** PYTHONITIS

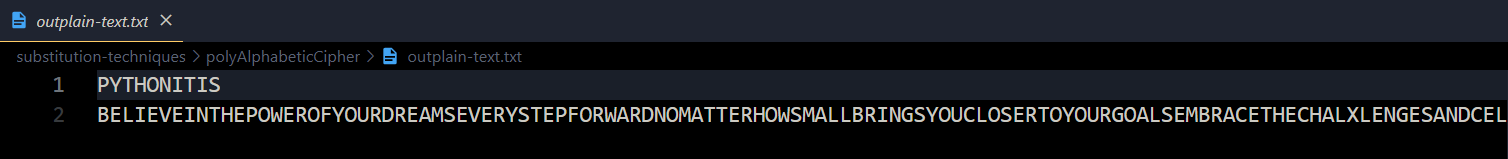
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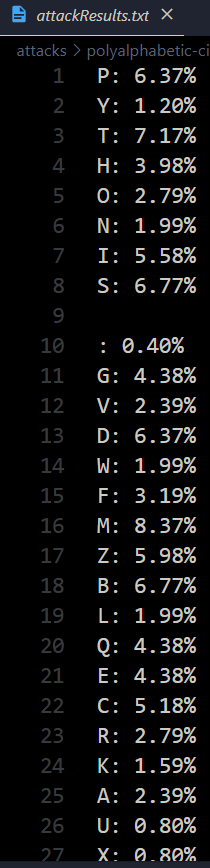
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**Attack -**

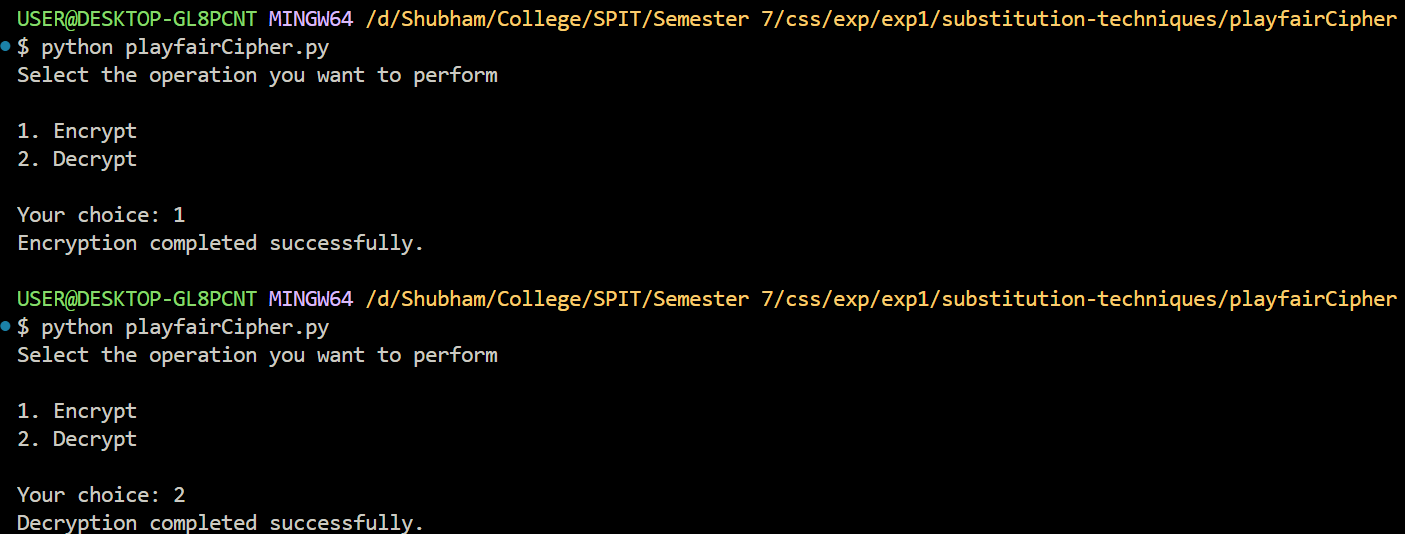
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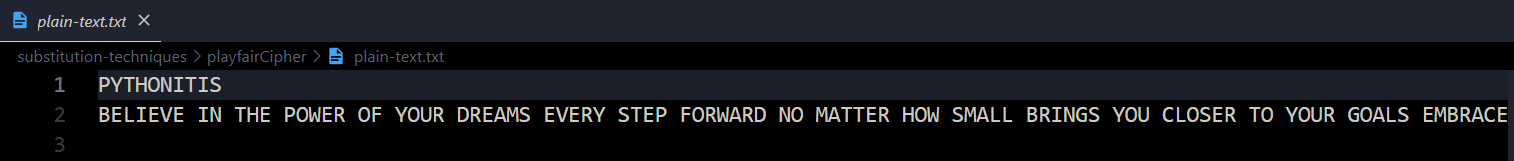
**5. Playfair Cipher**

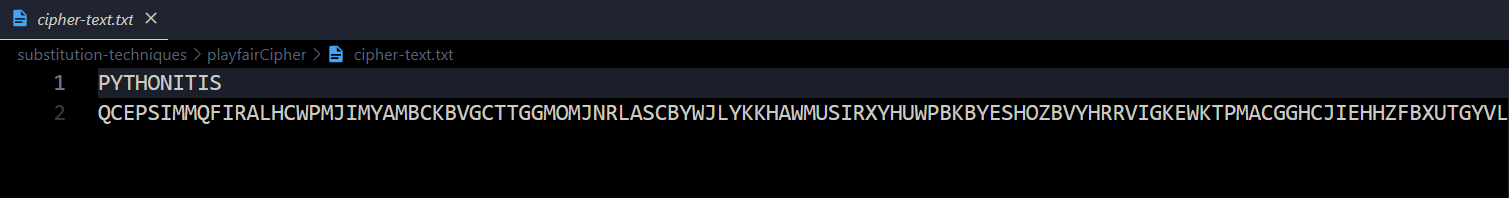
**Plain text -** BELIEVE IN THE POWER OF YOUR DREAMS EVERY STEP FORWARD NO MATTER HOW SMALL BRINGS YOU CLOSER TO YOUR GOALS EMBRACE THE CHALLENGES AND CELEBRATE THE PROGRESS YOU ARE STRONGER AND MORE CAPABLE THAN YOU KNOW KEEP PUSHING FORWARD WITH PASSION AND RESILIENCE YOUR FUTURE SELF WILL THANK YOU

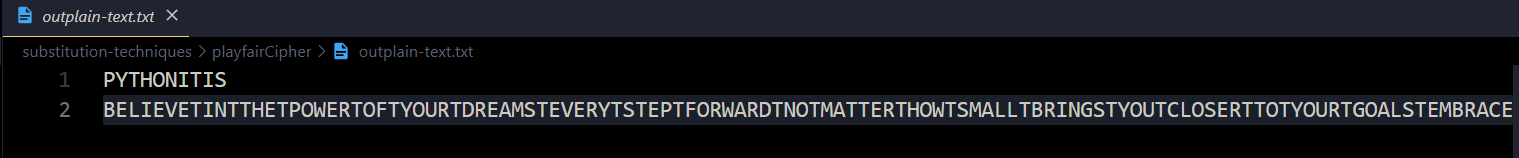
**Cipher text -** QCEPSIMMQFIRALHCWPMJIMYAMBCKBVGCTTGGMOMJNRLASCBYWJLYKKHAWMUSIRXYHUWPBKBYESHOZBVYHRRVIGKEWKTPMACGGHCJIEHHZFBXUTGYVLHGPXBUWYESSAOXALPLWAQRTXJJPRXAHUMMXJDEKLGFBRWMIYKLHFBKWFVCKAOALMUGGCMJOCIUTWIRAHBGGHCLZLHDHXMXXLESLOWAOMNGGUTYRGEBBZINTZGVWGBSCBMYSFQEQWCAXAMBCKBXJRNYSGAXTXIUBSZGBAIFZRRVI

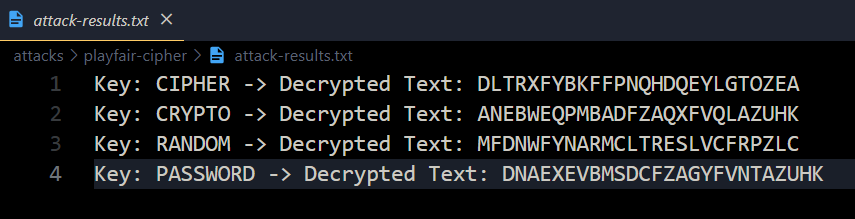
**Key -** PYTHONITIS

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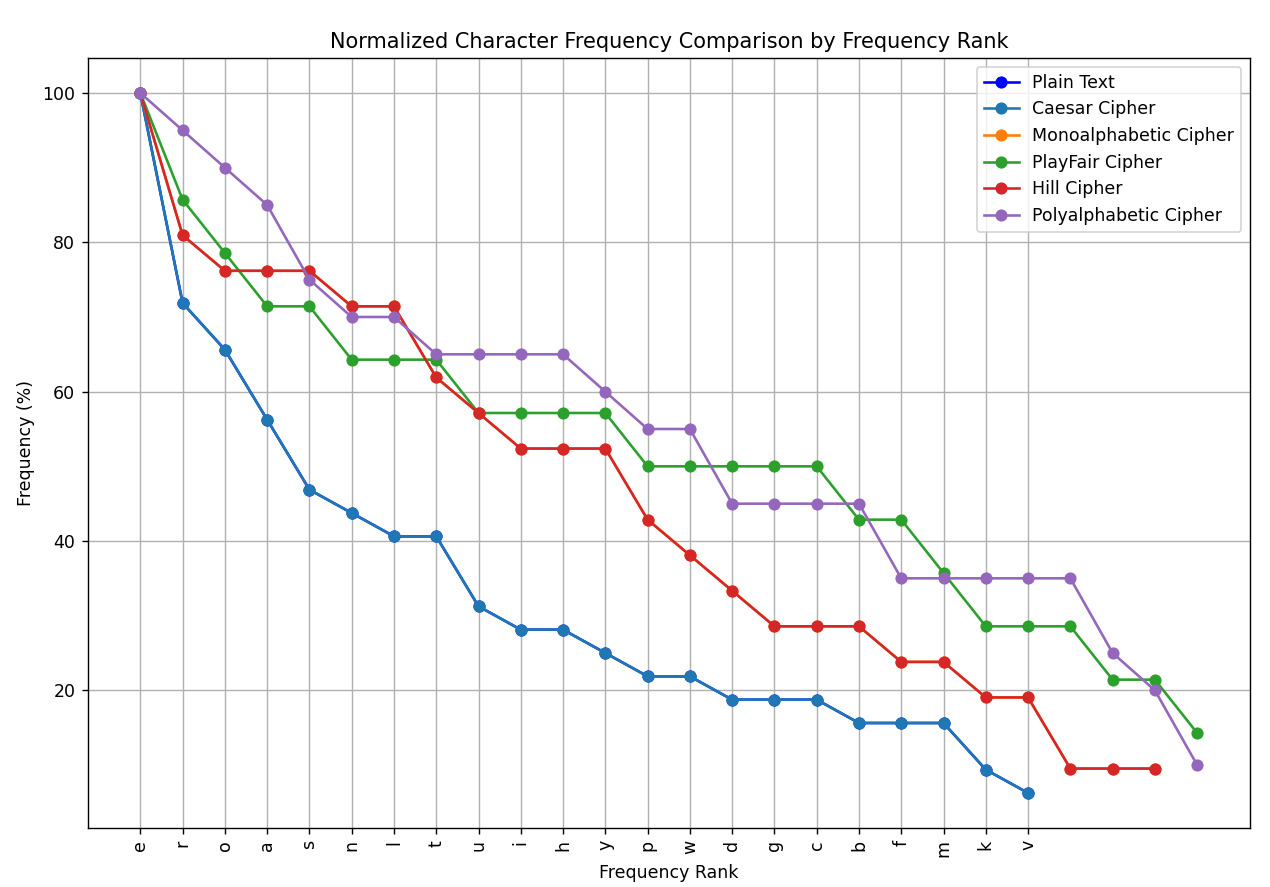
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**Attack - **

**Part 3: Plotting: Normalized Character Frequency Comparison by Frequency Rank**

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