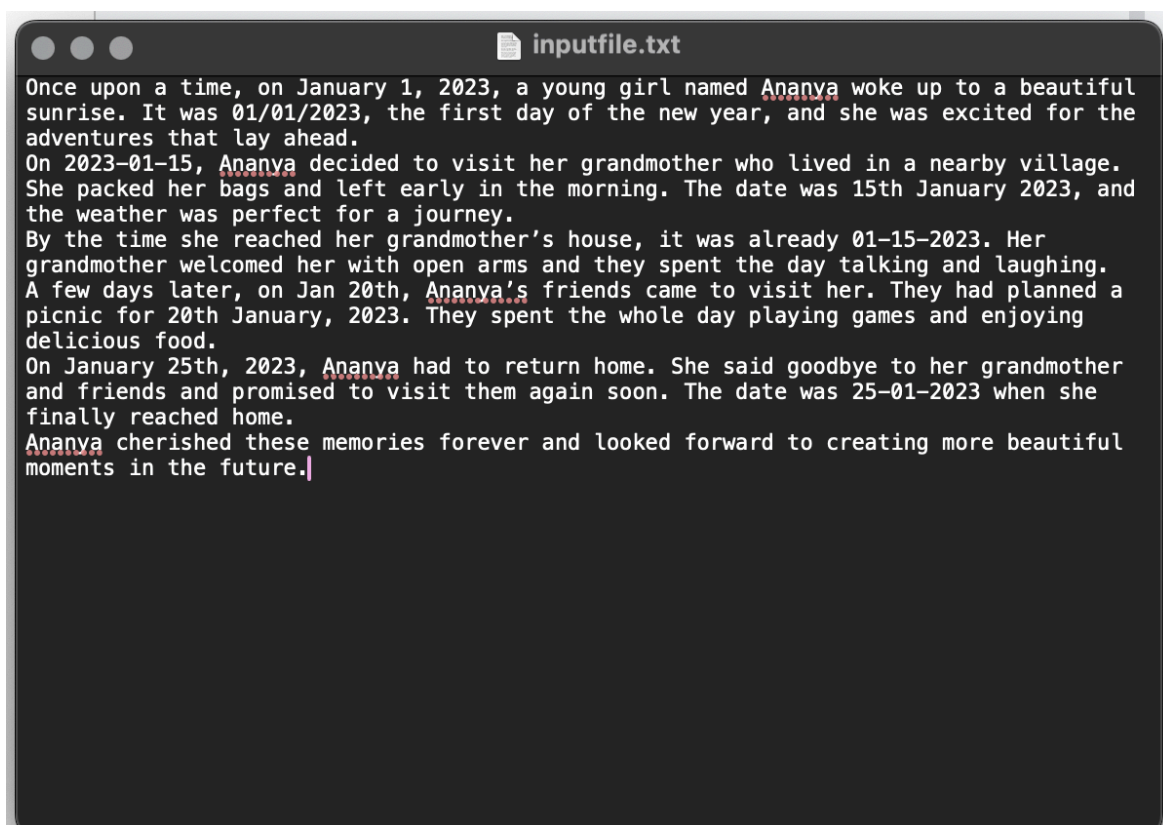


## Learning Summary:

Through this project, I gained hands-on experience with bash scripting, particularly focusing on how to handle user input, create and manipulate files, and utilize regular expressions for pattern matching. The project required me to identify various date formats such as "dd/mm/yyyy," "mm-dd-yyyy," and textual representations like "March 25, 2024." I learned how to construct complex regex patterns to capture different date formats and enhance my script's flexibility. Additionally, this project improved my understanding of file redirection in bash, allowing me to generate and write outputs to a report file. Overall, it strengthened my skills in bash scripting, file handling, and regular expressions.

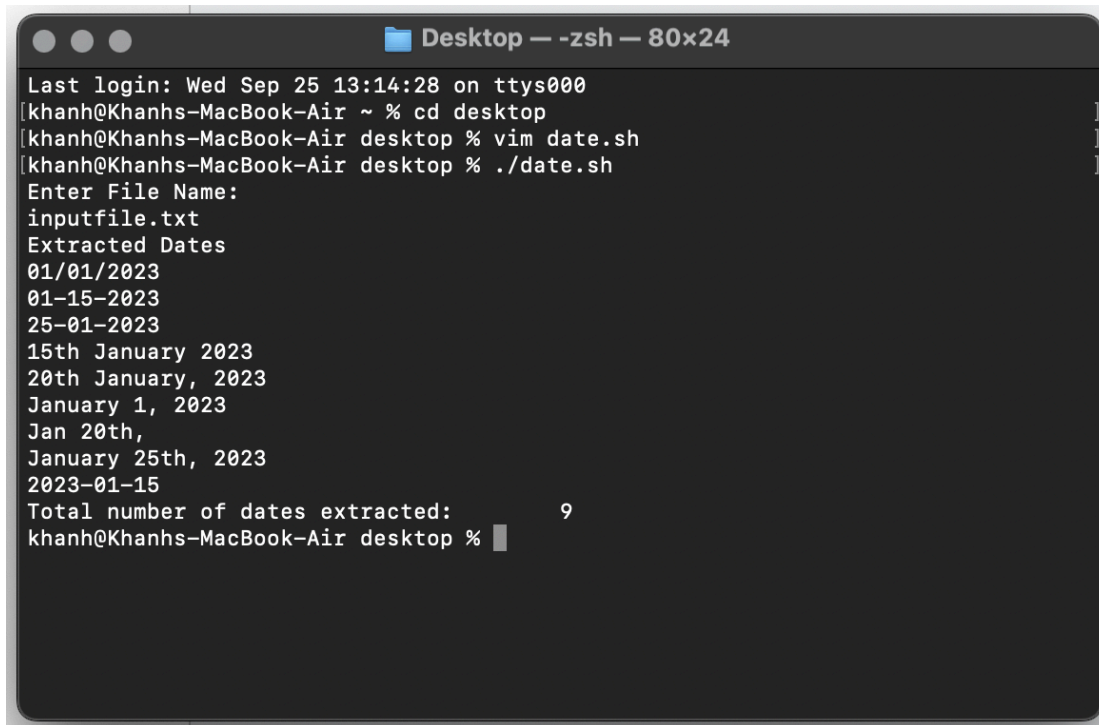
## Project Outputs:

*Input:*

A screenshot of a terminal window with a dark background. The title bar at the top shows three window control buttons (red, yellow, green) on the left and the filename 'inputfile.txt' in the center. The terminal displays a text file with a story about a girl named Ananya. The text is as follows:

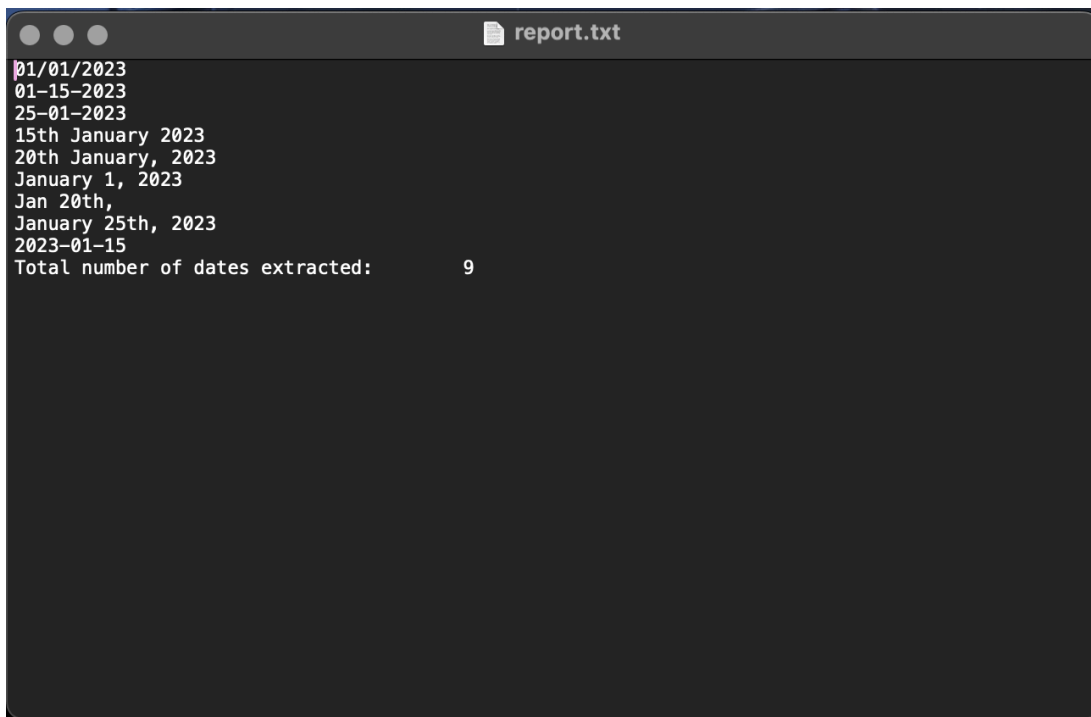
```
Once upon a time, on January 1, 2023, a young girl named Ananya woke up to a beautiful
sunrise. It was 01/01/2023, the first day of the new year, and she was excited for the
adventures that lay ahead.
On 2023-01-15, Ananya decided to visit her grandmother who lived in a nearby village.
She packed her bags and left early in the morning. The date was 15th January 2023, and
the weather was perfect for a journey.
By the time she reached her grandmother's house, it was already 01-15-2023. Her
grandmother welcomed her with open arms and they spent the day talking and laughing.
A few days later, on Jan 20th, Ananya's friends came to visit her. They had planned a
picnic for 20th January, 2023. They spent the whole day playing games and enjoying
delicious food.
On January 25th, 2023, Ananya had to return home. She said goodbye to her grandmother
and friends and promised to visit them again soon. The date was 25-01-2023 when she
finally reached home.
Ananya cherished these memories forever and looked forward to creating more beautiful
moments in the future.
```

*Output:*



```
Desktop — -zsh — 80x24
Last login: Wed Sep 25 13:14:28 on ttys000
khanh@Khanhs-MacBook-Air ~ % cd desktop
khanh@Khanhs-MacBook-Air desktop % vim date.sh
khanh@Khanhs-MacBook-Air desktop % ./date.sh
Enter File Name:
inputfile.txt
Extracted Dates
01/01/2023
01-15-2023
25-01-2023
15th January 2023
20th January, 2023
January 1, 2023
Jan 20th,
January 25th, 2023
2023-01-15
Total number of dates extracted:          9
khanh@Khanhs-MacBook-Air desktop %
```

*Output File:*



```
report.txt
01/01/2023
01-15-2023
25-01-2023
15th January 2023
20th January, 2023
January 1, 2023
Jan 20th,
January 25th, 2023
2023-01-15
Total number of dates extracted:          9
```