**Code:**

#!/bin/bash

# Directory for storing diary entries

DIARY\_DIR="$HOME/diary"

mkdir -p "$DIARY\_DIR"

chmod 700 "$DIARY\_DIR" # Restrict permissions

# Function to create a new diary entry

create\_entry() {

echo "Enter your diary entry (press Ctrl+D to save):"

local entry\_date=$(date '+%Y-%m-%d')

cat > "$DIARY\_DIR/$entry\_date.txt"

echo "Entry saved for $entry\_date."

}

# Function to view an entry by date

view\_entry() {

echo "Enter date of entry to view (YYYY-MM-DD): "

read entry\_date

local file="$DIARY\_DIR/$entry\_date.txt"

if [[ -f "$file" ]]; then

cat "$file"

else

echo "No entry found for $entry\_date."

fi

}

# Function to search entries

search\_entries() {

echo "Enter keyword to search:"

read keyword

grep -iRl "$keyword" "$DIARY\_DIR" || echo "No entries found containing '$keyword'."

}

# Main menu loop

while true; do

echo "1. Create a new entry"

echo "2. View an entry"

echo "3. Search entries"

echo "4. Exit"

echo -n "Choose an option: "

read choice

case $choice in

1) create\_entry ;;

2) view\_entry ;;

3) search\_entries ;;

4) break ;;

\*) echo "Invalid option. Please try again." ;;

esac

done