Girls' Programming Network

Chatbot!

Tutors Only

This project was created by GPN Australia for GPN sites all around Australia!

This workbook and related materials were created by tutors at:

Sydney, Canberra and Perth

Girls' Programming Network

If you see any of the following tutors don't forget to thank them!!

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Part 1: Who are you?

1.1: Welcome the user

The code should look something like this:

```
# Imports go here

# Read functions go here

# Write functions go here

# Main code goes here
print("Welcome to the Secret Diary Chatbot!")
```

1.2: Identify yourself!

The code should look something like this:

```
# Imports go here

# Read functions go here

# Write functions go here

# Main code goes here
print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
```

1.3: First action

The code should look something like this:

```
# Imports go here

# Read functions go here

# Write functions go here

# Main code goes here
```

```python
print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
```

1.4: Completing the menu

The code should look something like this:

```python
# Imports go here


# Read functions go here


# Write functions go here


# Main code goes here
print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        print("read")
    elif action == "2":
        print("write")
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

Bonus 1.5: Wait a second!

The code should look something like this:

```python
# Imports go here
import time

# Read functions go here

# Write functions go here

# Main code goes here
print("Welcome to the Secret Diary Chatbot!")
time.sleep(0.5)
name = input("What is your name? ")
print("Hello", name)
time.sleep(0.5)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        print("read")
        time.sleep(0.5)
    elif action == "2":
        print("write")
        time.sleep(0.5)
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
        time.sleep(0.5)
```

Part 2: Writing in the Diary

2.1: Writing to the diary

The code should look something like this:

```python
# Imports go here

# Read functions go here

# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")


# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        print("read")
    elif action == "2":
        print("write")
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

2.2: Writing what the user wants

The code should look something like this:

```python
# Imports go here

# Read functions go here

# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        print("That date already exists")


# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        print("read")
    elif action == "2":
        print("write")
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

2.3: Do you want to add to your entry?

The code should look something like this:

```python
# Imports go here


# Read functions go here


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return



# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        print("read")
```

```python
        elif action == "2":
            write()
        elif action == "3":
            print("Ok goodbye :(")
            exit = True
        else:
            print("I'm sorry I don't know what you want me to do.")
```

2.4: Getting a new entry

The code should look something like this:

```python
# Imports go here


# Read functions go here


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")


def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()
```

```python
# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        print("read")
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

Part 3: Reading the diary

3.1: Opening the file

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            print(line)



# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
```

```
    write_to_diary()



# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        print("read")
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

3.2: Dates and entries

The code should look something like this:

```
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
```

```python
                current_entry = []


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()



# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
```

```
            print("read")
        elif action == "2":
            write()
        elif action == "3":
            print("Ok goodbye :(")
            exit = True
        else:
            print("I'm sorry I don't know what you want me to do.")
```

3.3: What do you want to read?

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("All")
    elif action_read == "2":
        print("Number")
    elif action_read == "3":
        print("Date")
    else:
        print("I didn't understand")


# Write functions go here
```

```python
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")


def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()




# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
```

```python
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

Part 4: Reading the diary pt.2

4.1: Reading all of the diary!

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action_read == "2":
        print("Number")
    elif action_read == "3":
        print("Date")
    else:
        print("I didn't understand")


# Write functions go here
```

```python
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")


def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()




# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
```

```
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

4.2: Reading the nth entry

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action_read == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
```

```python
        elif action_read == "3":
            print("Date")
        else:
            print("I didn't understand")



# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()



# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
```

```python
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

4.3: Reading the entry from a date

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action_read == "2":
```

```python
            number = int(input("What number entry do you want to read? "))
            if number <= len(diary.keys()):
                print("Here is entry number",number)
                num_to_date = list(diary.keys())[number-1]
                print(diary[num_to_date])
            else:
                print("There are not that many entries in the diary")
        elif action_read == "3":
            date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
            if date in diary:
                print("Here is your entry from",date)
                print(diary[date])
            else:
                print("There is not an entry for that date sorry")
        else:
            print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()
```

```python
# Main code goes here
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

Part 5: It's a SECRET diary!

5.1: Welcome to the Secret Diary

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action_read == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
    elif action_read == "3":
```

```python
        date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()



# Main code goes here
password = "Tutors rock!"
access = None
diary = {}
```

```
print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

5.2: What's the password?

The code should look something like this:

```
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
```

```python
            print("Ok! here is your whole diary")
            for key in diary:
                print("Here is your entry from",key)
                print(diary[key])
                print("--------------------")
                print()
        elif action_read == "2":
            number = int(input("What number entry do you want to read? "))
            if number <= len(diary.keys()):
                print("Here is entry number",number)
                num_to_date = list(diary.keys())[number-1]
                print(diary[num_to_date])
            else:
                print("There are not that many entries in the diary")
        elif action_read == "3":
            date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
            if date in diary:
                print("Here is your entry from",date)
                print(diary[date])
            else:
                print("There is not an entry for that date sorry")
        else:
            print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
```

```python
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()



# Main code goes here
password = "Tutors rock!"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1


while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

5.3: Guessing Game

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("---------------------")
            print()
    elif action_read == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
    elif action_read == "3":
        date = input("What is the date of the entry you would like to read (dd/mm/yyyy)? ")
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
```

```python
            print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()



# Main code goes here
password = "Tutors rock!"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
```

```python
        guesses += 1
        if guess == password:
            access = "Full"
        else:
            print("That password was incorrect!")


while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

5.4: Too many guesses

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
```

```python
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action_read == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
    elif action_read == "3":
        date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
```

```python
                current.append(diary[entry_date])
            else:
                print("Ok. I'll transfer you back to the main menu...")
                return
        entry = input("What would you like to add to the entry? ")
        while entry:
            current.append(entry)
            entry = input("")
        diary[entry_date] = "\n".join(current)
        write_to_diary()


# Main code goes here
password = "Tutors rock!"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1
    if guess == password:
        access = "Full"
    else:
        print("That password was incorrect!")

if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True


while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
```

```python
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

5.5: Different access

The code should look something like this:

```python
# Imports go here

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("---------------------")
            print()
    elif action_read == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
```

```
        else:
            print("There are not that many entries in the diary")
    elif action_read == "3":
        date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary:
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    diary[entry_date] = "\n".join(current)
    write_to_diary()



# Main code goes here
password = "Tutors rock!"
```

```python
decoy = "password123"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1
    if guess == password:
        access = "Full"
    elif guess == decoy:
        access = "Decoy"
    else:
        print("That password was incorrect!")

if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True


while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

5.6: Implementing the decoy

The code should look something like this:

```python
# Imports go here
```

```python
# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    if access == "Decoy":
        print("Ok! here is your whole diary")
        return
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action_read == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
    elif action_read == "3":
        date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
```

```python
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary and access == "Full":
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    if access == "Full":
        diary[entry_date] = "\n".join(current)
        write_to_diary()



# Main code goes here
password = "Tutors rock!"
decoy = "password123"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False
```

```python
guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1
    if guess == password:
        access = "Full"
    elif guess == decoy:
        access = "Decoy"
    else:
        print("That password was incorrect!")

if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True


while not exit:
    action = input("""What would you like to do?
1) read the diary
2) write into the diary
3) end the program """)
    if action == "1":
        read()
    elif action == "2":
        write()
    elif action == "3":
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

Part 6: Regex it up!

6.1: Main menu

The code should look something like this:

```python
# Imports go here
import re

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read():
    if access == "Decoy":
        print("Ok! here is your whole diary")
        return
    action_read = input("""What would you like to read
1) The whole diary
2) A specific entry
3) An entry from a specific date """)
    if action_read == "1":
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action_read == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
```

```python
                print(diary[num_to_date])
            else:
                print("There are not that many entries in the diary")
        elif action_read == "3":
            date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
            if date in diary:
                print("Here is your entry from",date)
                print(diary[date])
            else:
                print("There is not an entry for that date sorry")
        else:
            print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary and access == "Full":
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    if access == "Full":
        diary[entry_date] = "\n".join(current)
        write_to_diary()
```

```python
# Main code goes here
password = "Tutors rock!"
decoy = "password123"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1
    if guess == password:
        access = "Full"
    elif guess == decoy:
        access = "Decoy"
    else:
        print("That password was incorrect!")

if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True


while not exit:
    action = input("Hey! What would you like to do? ").lower()
    if re.search(r"\b(read|see|view)",action):
        read()
    elif re.search(r"\b(write|add|append)",action):
        write()
    elif re.search(r"\b(stop|quit|end)",action):
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

6.2: Updating the read function

The code should look something like this:

```python
# Imports go here
import re
```

```python
# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read(action):
    if access == "Decoy":
        print("Ok! here is your whole diary")
        return
    if re.search(r"\b(all|whole|full)",action):
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
    elif action == "3":
        date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")
```

```python
# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary and access == "Full":
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    if access == "Full":
        diary[entry_date] = "\n".join(current)
        write_to_diary()



# Main code goes here
password = "Tutors rock!"
decoy = "password123"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
```

```python
        guesses += 1
        if guess == password:
            access = "Full"
        elif guess == decoy:
            access = "Decoy"
        else:
            print("That password was incorrect!")


if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True



while not exit:
    action = input("Hey! What would you like to do? ").lower()
    if re.search(r"\b(read|see|view)",action):
        read(action)
    elif re.search(r"\b(write|add|append)",action):
        write()
    elif re.search(r"\b(stop|quit|end)",action):
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

6.3: Dates Dates Dates

The code should look something like this:

```python
# Imports go here
import re

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
```

```python
            current_entry = []
def read(action):
    if access == "Decoy":
        print("Ok! here is your whole diary")
        return
    if re.search(r"\b(all|whole|full)",action):
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif action == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
    elif
re.search(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\s
)",action):
        date = input("What is the date of the entry you would like to
read (dd/mm/yyyy)? ")
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
```

```python
        entry_date = input("What date is the entry for? ")
        if entry_date in diary and access == "Full":
            add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
            if add == "yes":
                current.append(diary[entry_date])
            else:
                print("Ok. I'll transfer you back to the main menu...")
                return
        entry = input("What would you like to add to the entry? ")
        while entry:
            current.append(entry)
            entry = input("")
        if access == "Full":
            diary[entry_date] = "\n".join(current)
            write_to_diary()




# Main code goes here
password = "Tutors rock!"
decoy = "password123"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1
    if guess == password:
        access = "Full"
    elif guess == decoy:
        access = "Decoy"
    else:
        print("That password was incorrect!")

if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True
```

```python
while not exit:
    action = input("Hey! What would you like to do? ").lower()
    if re.search(r"\b(read|see|view)",action):
        read(action)
    elif re.search(r"\b(write|add|append)",action):
        write()
    elif re.search(r"\b(stop|quit|end)",action):
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

6.4: Extracting a date

The code should look something like this:

```python
# Imports go here
import re

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read(action):
    if access == "Decoy":
        print("Ok! here is your whole diary")
        return
    if re.search(r"\b(all|whole|full)",action):
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
```

```python
    elif action == "2":
        number = int(input("What number entry do you want to read? "))
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
    elif
re.search(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\s
)",action):
        temp =
re.findall(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\
s)",action)[0]
        days = temp[1]
        months = temp[3]
        years = temp[5]
        date = days + "/" + months + "/" + years
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary and access == "Full":
        add = input("That date is already in the diary. Would you like to
add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
```

```python
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
    if access == "Full":
        diary[entry_date] = "\n".join(current)
        write_to_diary()



# Main code goes here
password = "Tutors rock!"
decoy = "password123"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1
    if guess == password:
        access = "Full"
    elif guess == decoy:
        access = "Decoy"
    else:
        print("That password was incorrect!")

if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True


while not exit:
    action = input("Hey! What would you like to do? ").lower()
    if re.search(r"\b(read|see|view)",action):
        read(action)
    elif re.search(r"\b(write|add|append)",action):
        write()
```

```
        elif re.search(r"\b(stop|quit|end)",action):
            print("Ok goodbye :(")
            exit = True
        else:
            print("I'm sorry I don't know what you want me to do.")
```

6.5: Ordinals and numbers

The code should look something like this:

```
# Imports go here
import re

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read(action):
    if access == "Decoy":
        print("Ok! here is your whole diary")
        return
    if re.search(r"\b(all|whole|full)",action):
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("--------------------")
            print()
    elif re.search(r"(^|\s)\d+(st|nd|rd|th|)(\s|$)",action):
        number =
int(re.findall(r"(^|\s)\d+(st|nd|rd|th|)(\s|$)",action)[0][1])
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
```

```python
        else:
            print("There are not that many entries in the diary")
    elif re.search(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\s)",action):
        temp = re.findall(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\s)",action)[0]
        days = temp[1]
        months = temp[3]
        years = temp[5]
        date = days + "/" + months + "/" + years
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    entry_date = input("What date is the entry for? ")
    if entry_date in diary and access == "Full":
        add = input("That date is already in the diary. Would you like to add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
    entry = input("What would you like to add to the entry? ")
    while entry:
        current.append(entry)
        entry = input("")
```

```python
        if access == "Full":
            diary[entry_date] = "\n".join(current)
            write_to_diary()




# Main code goes here
password = "Tutors rock!"
decoy = "password123"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1
    if guess == password:
        access = "Full"
    elif guess == decoy:
        access = "Decoy"
    else:
        print("That password was incorrect!")

if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True


while not exit:
    action = input("Hey! What would you like to do? ").lower()
    if re.search(r"\b(read|see|view)",action):
        read(action)
    elif re.search(r"\b(write|add|append)",action):
        write()
    elif re.search(r"\b(stop|quit|end)",action):
        print("Ok goodbye :(")
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```

The code should look something like this:

```python
# Imports go here
import re

# Read functions go here
def open_diary():
    global diary
    current_entry = []
    with open("diary.txt","r") as f:
        for line in f:
            line = line.strip()
            if line != "-------":
                current_entry.append(line)
            else:
                date = current_entry.pop(0)
                full_entry = "\n".join(current_entry)
                diary[date] = full_entry
                current_entry = []
def read(action):
    if access == "Decoy":
        print("Ok! here is your whole diary")
        return
    if re.search(r"\b(all|whole|full)",action):
        print("Ok! here is your whole diary")
        for key in diary:
            print("Here is your entry from",key)
            print(diary[key])
            print("---------------------")
            print()
    elif re.search(r"(^|\s)\d+(st|nd|rd|th|)(\s|$)",action):
        number = 
int(re.findall(r"(^|\s)\d+(st|nd|rd|th|)(\s|$)",action)[0][1])
        if number <= len(diary.keys()):
            print("Here is entry number",number)
            num_to_date = list(diary.keys())[number-1]
            print(diary[num_to_date])
        else:
            print("There are not that many entries in the diary")
    elif 
re.search(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\s
)",action):
        temp = 
```

```python
re.findall(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\
s)",action)[0]
        days = temp[1]
        months = temp[3]
        years = temp[5]
        date = days + "/" + months + "/" + years
        if date in diary:
            print("Here is your entry from",date)
            print(diary[date])
        else:
            print("There is not an entry for that date sorry")
    else:
        print("I didn't understand")


# Write functions go here
def write_to_diary():
    with open("diary.txt","w") as f:
        for key in diary:
            f.write(key+"\n")
            f.write(diary[key]+"\n")
            f.write("-------\n")

def write():
    global diary
    current = []
    test = input("What date is the entry for? ")
    if
re.search(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\s
)",test):
        temp =
re.findall(r"(^|\s)\d{1,2}(/|\\|-|\.)\d{1,2}(/|\\|-|\.)(\d{2}|\d{4})($|\
s)",test)[0]
        days = temp[1]
        months = temp[3]
        years = temp[5]
        entry_date = days + "/" + months + "/" + years
    if entry_date in diary and access == "Full":
        add = input("That date is already in the diary. Would you like
to add to it? (yes/no) ")
        if add == "yes":
            current.append(diary[entry_date])
        else:
            print("Ok. I'll transfer you back to the main menu...")
            return
```

```python
        entry = input("What would you like to add to the entry? ")
        while entry:
            current.append(entry)
            entry = input("")
        if access == "Full":
            diary[entry_date] = "\n".join(current)
            write_to_diary()



# Main code goes here
password = "Tutors rock!"
decoy = "password123"
access = None
diary = {}

print("Welcome to the Secret Diary Chatbot!")
name = input("What is your name? ")
print("Hello", name)
exit = False

guesses = 0
while access is None and guesses < 3:
    guess = input("What is the password? ")
    guesses += 1
    if guess == password:
        access = "Full"
    elif guess == decoy:
        access = "Decoy"
    else:
        print("That password was incorrect!")

if guess is None:
    print("You are not my owner GO AWAY >:(")
    exit = True


while not exit:
    action = input("Hey! What would you like to do? ").lower()
    if re.search(r"\b(read|see|view)",action):
        read(action)
    elif re.search(r"\b(write|add|append)",action):
        write()
    elif re.search(r"\b(stop|quit|end)",action):
        print("Ok goodbye :(")
```

```python
        exit = True
    else:
        print("I'm sorry I don't know what you want me to do.")
```