Program Report: HomeWork5

1. Purpose of the Code:

This C program provides users with basic functionalities such as viewing daily news, reading news, listing read news, and extracting encrypted information from news. It offers a user-friendly interface to easily access news and read desired articles.

2. Structure and Functions of the Code:

- **print_menu()**: Used to display the main menu to the user.
- **isRead(int id)**: Checks whether a news article has been read before.
- **count_news()**: Counts the total number of news articles.
- **print_news(int newsId, int isTitle)**: Prints the title or content of a specific news article.
- **calc_secret_number(int newId)**: Extracts an encrypted number from a news article.
- **menu_a()**: Allows the user to read a news article.
- **menu_b()**: Lists the read news articles.
- **menu_c()**: Extracts encrypted information from a news article.
- **menu()**: Manages the main menu.

3. Variables and Files:

- **AllNewsId**: File name containing IDs of all news articles.
- **New**: File name format associated with each news article ID.
- **ReadedNews**: File name containing IDs of read news articles.

4. Error Controls:

- Error conditions such as file opening or reading errors are checked, and appropriate feedback is provided to the user.
- Warning messages are displayed if the user inputs invalid entries.

5. User Inputs:

- User inputs are taken for selecting news, reading requests, and other operations.
- Based on the user's selections, relevant functions are called, and results are displayed to the user.

6. Example Usage:

The user is presented with a list of today's news. The user can read news, list read news, or select a news article to extract encrypted information. When the user wants to exit the program, the 'e' option is selected.

some sample outputs are given below:

Menu a outputs:

```
ahmet@Ahmet-MacBook-Pro HOMEWORK5 % ./main
Title of 1. news: Astronot Alper Gezeravcı'nın Dünya'ya dönüşü ertelendi
Title of 2. news: Bakan Kacır, Astronot Gezeravcı ile Videokonferans Görüşmesi Gerçekleştirdi
Title of 3. news: Alper Gezeravcı uzayda 9. deneyini yaptı.
Title of 4. news: Astronotların uzaydaki ilk sözleri
What do you want to do?
a.Read a new
b.List the readed news
c.Get decrypted information from the news
a
which news do you want to read?
2
This new is readed. Do you want to read again? Yes(1)/No(0)1
Bakan Kacır, Astronot Gezeravcı ile Videokonferans Görüşmesi Gerçekleştirdi

Sanayi ve Teknoloji Bakanı Sayın Mehmet Fatih Kacır'ın, Uluslararası Uzay İstasyonu'nda görevi
ni sürdüren Türkiye'nin ilk astronotu Alper Gezeravcı ile videokonferans aracılığıyla görüştüğ
ü canlı bağlantıyı Vali Mahmut Demirtaş, Bursa halkı ile birlikte izledi.
?
What do you want to do?
a.Read a new
b.List the readed news
c.Get decrypted information from the news
```

Menu b output:

```
What do you want to do?
a.Read a new
b.List the readed news
c.Get decrypted information from the news
b
Readed news are listed below
1. news is readed
2. news is readed
4. news is readed
3. news is readed
Do you want to contunie? Yes(1)/No(0)0
Good byeee...%
ahmet@Ahmet-MacBook-Pro HOMEWORK5 %
```

Menu c output:

```
Title of 1. news: Astronot Alper Gezeravcı'nın Dünya'ya dönüşü ertelendi
Title of 2. news: Bakan Kacır, Astronot Gezeravcı ile Videokonferans Görüşmesi Gerçekleştirdi
Title of 3. news: Alper Gezeravcı uzayda 9. deneyini yaptı.
Title of 4. news: Astronotların uzaydaki ilk sözleri
What do you want to do?
a.Read a new
b.List the readed news
c.Get decrypted information from the news
c
Which news would you like to decrypt?2
Bakan Kacır, Astronot Gezeravcı ile Videokonferans Görüşmesi Gerçekleştirdi

Sa4#nayi ve Teknoloji Bakanı Sayın Me7#hmet Fatih Kacır'ın, Uluslararası Uzay İstasyonu'nda g9
#örevini sürdüren Türkiye'nin il5#k astronotu Alper Gezeravcı ile videokonferans aracılığıyla
görüştü8#ğü canlı bağlantıyı Vali Mahmut De6#mirtaş, Bursa halkı ile birlikte izle9#di.

Experiment Key  1181144.00
What do you want to do?
a.Read a new
b.List the readed news
c.Get decrypted information from the news
```