Nation University
มหาวิทยาลัยเนชั่น

รายงาน

Final project

โดย

นาย พิทยา กานต์อาสิญจ์

รายงานนี้เป็นส่วนหนึ่งของวิชาเขียนโปรแกรมภาษาจาวา BCOM 361
หลักสูตรบริหารธุรกิจบัณฑิต สาขาวิชาคอมพิวเตอร์ธุรกิจ
คณะบริหารธุรกิจและรัฐประศาสนศาสตร์

มหาวิทยาลัยเนชั่น
ปีการศึกษา 2561

คำนำ

รายงานรายวิชาเขียนโปรแกรมภาษาจาวา BCOM 361 จัดทำขึ้น โดยมีวัตถุประสงค์เพื่อเป็น Final Project ของวิชาเขียนโปรแกรมภาษาจาวา BCOM 361 เป็นโปรแกรม 14 โปรแกรมที่ใช้ในการเพิ่มลบแก้ไขไฟล์ข้อมูลเกี่ยวกับนักเรียนและวิชาที่ลงทะเบียน

พิทยา กานต์อาสิญจ์

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สารบัญ

1. Source Code

```java
import java.io.*;
import java.lang.*;
import java.util.regex.*;
class finalproject {
public static void main(String args[]) throws IOException {
    String waitopt;
    BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
    String buf;
    waitopt  = "Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : ";
    displaymenu();
    System.out.print(waitopt);
    buf = stdin.readLine();
    while (!buf.equals("0")) {
        if (buf.equals("0") || buf.equals("bye")) {
            System.out.println("Bye Bye");
            break;
        } else if (buf.equals("1")) {
            addstu();
            buf = " ";
        } else if (buf.equals("2")) {
            addsubj();
            buf = " ";
        } else if (buf.equals("3")) {
            addreg();
            buf = " ";
        } else if (buf.equals("4")) {
            deletestu();
            buf = " ";
        } else if (buf.equals("5")) {
            deletesubj();
            buf = " ";
        } else if (buf.equals("6")) {
            deletereg();
            buf = " ";
        } else if (buf.equals("7")) {
            editstu();
            buf = " ";
        } else if (buf.equals("8")) {
            editsubj();
            buf = " ";
        } else if (buf.equals("9")) {
            editreg();
            buf = " ";
        } else if (buf.equals("10")) {
            list("student.txt");
            buf = " ";
        } else if (buf.equals("11")) {
            list("subj.txt");
            buf = " ";
        } else if (buf.equals("12")) {
            list("regist.txt");
            buf = " ";
        }else if (buf.equals("13")) {
            Search();
            buf = " ";
        } else if (buf.equals("14")) {
            MyData();
            buf = " ";
        }  else {
            System.out.print(waitopt);
            buf = stdin.readLine();
        // buf = (char)System.in.read(); // for 1 character
        }
    }
}

    //========================MENU=============================
    static void displaymenu () {
        System.out.println("0 : bye bye");
        System.out.println("1 : Add Student Data");
        System.out.println("2 : Add Subject Data");
        System.out.println("3 : Add Regist Data");
        System.out.println("4 : Delete Student Data");
        System.out.println("5 : Delete Subject Data");
        System.out.println("6 : Delete on id");
        System.out.println("7 : Edit Student Data");
        System.out.println("8 : Edit Subject Data");
        System.out.println("9 : Edit Regist Data");
        System.out.println("10 : List Student Data");
```

```java
 79             System.out.println("11 : List Subject Data");
 80             System.out.println("12 : List Regist Data");
 81             System.out.println("13 : Search Regist Data");
 82             System.out.println("14 : My Data");
 83             System.out.println("");
 84         }
 85         //=====================1. Add Student Data==================================
 86     public static void addstu () throws IOException {
 87             BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
 88             String bufid,bufname;
 89             System.out.print("Student id : ");
 90             bufid = stdin.readLine();
 91             System.out.print("Student name : ");
 92             bufname = stdin.readLine();
 93             String b;
 94             String ar[] = new String[10];
 95             FileReader fin = new FileReader("student.txt");
 96             BufferedReader bin = new BufferedReader (fin);
 97             int i = 0;
 98             while ((b =  bin.readLine()) != null) {
 99                 ar[i] = b;
100                 i = i + 1;
101             }
102             fin.close();
103             //
104             int tot = i;
105             FileOutputStream fout = new FileOutputStream("student.txt");
106             BufferedOutputStream bout = new BufferedOutputStream(fout);
107             PrintStream pout = new PrintStream(bout);
108             i = 0;
109             while (i < tot) {
110                 pout.println(ar[i]);
111                 i = i + 1;
112             }
113             pout.println(bufid + "," + bufname);
114             System.out.println("Add Student : completely");
115             pout.close();
116         }
117         //=====================2. Add Subject Data==================================
118     public static void addsubj () throws IOException {
119             BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
120             String bufid,bufname;
121             System.out.print("Wait subj ID : ");
122             bufid = stdin.readLine();
123             System.out.print("Wait subj name : ");
124             bufname = stdin.readLine();
125             String b;
126             String ar[] = new String[10];
127             FileReader fin = new FileReader("subj.txt");
128             BufferedReader bin = new BufferedReader (fin);
129             int i = 0;
130             while ((b =  bin.readLine()) != null) {
131                 ar[i] = b;
132                 i = i + 1;
133             }
134             fin.close();
135             //
136             int tot = i;
137             FileOutputStream fout = new FileOutputStream("subj.txt");
138             BufferedOutputStream bout = new BufferedOutputStream(fout);
139             PrintStream pout = new PrintStream(bout);
140             i = 0;
141             while (i < tot) {
142                 pout.println(ar[i]);
143                 i = i + 1;
144             }
145             pout.println(bufid + "," + bufname );
146             System.out.println("Add Subject : completely");
147             pout.close();
148         }
149         //=====================3. Add Regist Data==================================
150     public static void addreg () throws IOException {
151             BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
152             String bufid,bufname,bufgrade;
153             System.out.print("Wait Student ID : ");
154             bufid = stdin.readLine();
155             System.out.print("Wait Subject ID : ");
156             bufname = stdin.readLine();
```

```java
            System.out.print("Wait Grade: ");
            bufgrade = stdin.readLine();
            String b;
            String ar[] = new String[10];
            FileReader fin = new FileReader("regist.txt");
            BufferedReader bin = new BufferedReader (fin);
            int i = 0;
            while ((b =  bin.readLine()) != null) {
                ar[i] = b;
                i = i + 1;
            }
            fin.close();
            //
            int tot = i;
            FileOutputStream fout = new FileOutputStream("regist.txt");
            BufferedOutputStream bout = new BufferedOutputStream(fout);
            PrintStream pout = new PrintStream(bout);
            i = 0;
            while (i < tot) {
                pout.println(ar[i]);
                i = i + 1;
            }
            pout.println(bufid + "," + bufname );
            System.out.println("Add Regist : completely");
            pout.close();
        }
    //=======================4. Delete Student===============================
    public static void deletestu () throws IOException {
        BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
        String bufid;
        String a;
        String br[] = new String[10];
        FileReader oin = new FileReader("student.txt");
        BufferedReader pin = new BufferedReader (oin);
        while ((a =  pin.readLine()) != null) {
            System.out.print(a+"\n");
        }
        System.out.print("Wait STUDENT id : ");
        bufid = stdin.readLine();
        String b;
        String ar[] = new String[10];
        FileReader fin = new FileReader("student.txt");
        BufferedReader bin = new BufferedReader (fin);
        int i = 0;
        while ((b =  bin.readLine()) != null) {
            ar[i] = b;
            i = i + 1;
        }
        fin.close();
        //
        int tot = i;
        FileOutputStream fout = new FileOutputStream("student.txt");
        BufferedOutputStream bout = new BufferedOutputStream(fout);
        PrintStream pout = new PrintStream(bout);
        i = 0;
        while (i < tot) {
            if (bufid.equals(ar[i].substring(0,3))) {
                System.out.println("Delete STUDENT : completely");
            } else {
                pout.println(ar[i]);
            }
            i = i + 1;
        }
        pout.close();
    }
    //=======================5. Delete Subject===============================
    public static void deletesubj () throws IOException {
        BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
        String bufid;
        String a;
        String br[] = new String[10];
        FileReader oin = new FileReader("subj.txt");
        BufferedReader pin = new BufferedReader (oin);
        while ((a =  pin.readLine()) != null) {
            System.out.print(a+"\n");
        }
        System.out.print("Wait SUBJECT id : ");
        bufid = stdin.readLine();
```

```java
        String b;
        String ar[] = new String[10];
        FileReader fin = new FileReader("subj.txt");
        BufferedReader bin = new BufferedReader (fin);
        int i = 0;
        while ((b =  bin.readLine()) != null) {
            ar[i] = b;
            i = i + 1;
        }
        fin.close();
        //
        int tot = i;
        FileOutputStream fout = new FileOutputStream("subj.txt");
        BufferedOutputStream bout = new BufferedOutputStream(fout);
        PrintStream pout = new PrintStream(bout);
        i = 0;
        while (i < tot) {
            if (bufid.equals(ar[i].substring(0,2))) {
                System.out.println("Delete SUBJECT : completely");
            } else {
                pout.println(ar[i]);
            }
            i = i + 1;
        }
        pout.close();
    }
//=====================6. Delete Regist==============================
    public static void deletereg () throws IOException {
        BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
        String bufid;
        String a;
        String br[] = new String[10];
        FileReader oin = new FileReader("regist.txt");
        BufferedReader pin = new BufferedReader (oin);
        while ((a =  pin.readLine()) != null) {
            System.out.print(a+"\n");
        }
        System.out.print("Wait REGIST id : ");
        bufid = stdin.readLine();
        String b;
        String ar[] = new String[10];
        FileReader fin = new FileReader("regist.txt");
        BufferedReader bin = new BufferedReader (fin);
        int i = 0;
        while ((b =  bin.readLine()) != null) {
            ar[i] = b;
            i = i + 1;
        }
        fin.close();
        //
        int tot = i;
        FileOutputStream fout = new FileOutputStream("regist.txt");
        BufferedOutputStream bout = new BufferedOutputStream(fout);
        PrintStream pout = new PrintStream(bout);
        i = 0;
        while (i < tot) {
            if (bufid.equals(ar[i].substring(0,3))) {
                System.out.println("Delete REGIST : completely");
            } else {
                pout.println(ar[i]);
            }
            i = i + 1;
        }
    pout.close();
    }
//=====================7. Edit Student==============================
    public static void editstu () throws IOException {
        BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
        String bufid,bufname;
        String a;
        String br[] = new String[10];
        FileReader oin = new FileReader("student.txt");
        BufferedReader pin = new BufferedReader (oin);
        while ((a =  pin.readLine()) != null) {
            System.out.print(a+"\n");
        }
        System.out.print("Wait STUDENT id : ");
        bufid = stdin.readLine();
```

```java
313            System.out.print("Wait STUDENT name : ");
314            bufname = stdin.readLine();
315            String b;
316            String ar[] = new String[10];
317            FileReader fin = new FileReader("student.txt");
318            BufferedReader bin = new BufferedReader (fin);
319            int i = 0;
320            while ((b =  bin.readLine()) != null) {
321                ar[i] = b;
322                i = i + 1;
323            }
324            fin.close();
325            //
326            int tot = i;
327            FileOutputStream fout = new FileOutputStream("student.txt");
328            BufferedOutputStream bout = new BufferedOutputStream(fout);
329            PrintStream pout = new PrintStream(bout);
330            i = 0;
331            while (i < tot) {
332                if (bufid.equals(ar[i].substring(0,3))) {
333                    pout.println(bufid + "," + bufname);
334                    System.out.println("Edit STUDENT : completely");
335                } else {
336                    pout.println(ar[i]);
337                }
338                i = i + 1;
339            }
340            pout.close();
341        }
342        //=====================8. Edit Subject===================================
343        public static void editsubj () throws IOException {
344            BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
345            String bufid,bufname;
346            String a;
347            String br[] = new String[10];
348            FileReader oin = new FileReader("subj.txt");
349            BufferedReader pin = new BufferedReader (oin);
350            while ((a =  pin.readLine()) != null) {
351                System.out.print(a+"\n");
352            }
353            System.out.print("Wait SUBJECT id : ");
354            bufid = stdin.readLine();
355            System.out.print("Wait SUBJECT name : ");
356            bufname = stdin.readLine();
357            String b;
358            String ar[] = new String[10];
359            FileReader fin = new FileReader("subj.txt");
360            BufferedReader bin = new BufferedReader (fin);
361            int i = 0;
362            while ((b =  bin.readLine()) != null) {
363                ar[i] = b;
364                i = i + 1;
365            }
366            fin.close();
367            //
368            int tot = i;
369            FileOutputStream fout = new FileOutputStream("subj.txt");
370            BufferedOutputStream bout = new BufferedOutputStream(fout);
371            PrintStream pout = new PrintStream(bout);
372            i = 0;
373            while (i < tot) {
374                if (bufid.equals(ar[i].substring(0,1))) {
375                    pout.println(bufid + "," + bufname);
376                    System.out.println("Edit SUBJECT : completely");
377                } else {
378                    pout.println(ar[i]);
379                }
380                i = i + 1;
381            }
382        pout.close();
383        }
384        //=====================9. Edit Regist===================================
385        public static void editreg () throws IOException {
386            BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
387            String bufid,bufname,bufgrade;
388            String a;
389            String br[] = new String[10];
390            FileReader oin = new FileReader("regist.txt");
```

```java
        BufferedReader pin = new BufferedReader (oin);
        while ((a =  pin.readLine()) != null) {
            System.out.print(a+"\n");
        }
        System.out.print("Wait STUDENT ID : ");
        bufid = stdin.readLine();
        System.out.print("Wait SUBJECT ID : ");
        bufname = stdin.readLine();
        String b;
        String ar[] = new String[10];
        FileReader fin = new FileReader("regist.txt");
        BufferedReader bin = new BufferedReader (fin);
        int i = 0;
        while ((b =  bin.readLine()) != null) {
            ar[i] = b;
            i = i + 1;
        }
        fin.close();
        //
        int tot = i;
        FileOutputStream fout = new FileOutputStream("regist.txt");
        BufferedOutputStream bout = new BufferedOutputStream(fout);
        PrintStream pout = new PrintStream(bout);
        i = 0;
        while (i < tot) {
            if (bufid.equals(ar[i].substring(0,3))) {
                pout.println(bufid + "," + bufname);
                System.out.println("Edit REGIST : completely");
            } else {
                pout.println(ar[i]);
            }
            i = i + 1;
        }
        pout.close();
    }
    //=====================10. 11. 12.===================================
    public static void list (String f) throws IOException {
        int n = 0;
        byte b[] = new byte[128];
        FileInputStream fin = new FileInputStream(f);
        while ((n = fin.read(b)) != -1) {
            for(int i=0;i<n;i++) {
                System.out.print((char)b[i]);
            }
        }
        fin.close();
    }
    //===================13. Search Regist Data===============================
    public static void Search() throws IOException {
        int found=0;
        char buf;
        String b,g = "";
        String[] fields;
        System.out.print("Enter Student ID :");
        buf = (char)System.in.read();
        while (buf != 'x') {
            g = g + buf;
            buf = (char)System.in.read();
        }
        FileReader fin = new FileReader("regist.txt");
        BufferedReader bin = new BufferedReader (fin);
        while ((b =  bin.readLine()) != null) {
            fields = b.split(",");
            if (fields[0].equals(g)) {
                System.out.println("Regist Data: "+"\n"+"Student ID:"+fields[0]+"\n"+"Subject ID:"+
                fields[1]);
                found = 1;
            }
        }
        if (found == 0) {
            System.out.println("Not found");
            fin.close();
        }
    }
    //======================14. MyData===========================
    public static void MyData () throws IOException {
        BufferedReader stdin = new BufferedReader(new InputStreamReader(System.in));
        String bufid;
        String a;
        String br[] = new String[10];
        FileReader oin = new FileReader("MyData.txt");
        BufferedReader pin = new BufferedReader (oin);
        while ((a =  pin.readLine()) != null) {
            System.out.print(a+"\n");
        }
    }
}
```

2. หน้าต่างผลลัพธ์

```
d:\JDK\bin>java finalproject
0 : bye bye
1 : Add Student Data
2 : Add Subject Data
3 : Add Regist Data
4 : Delete Student Data
5 : Delete Subject Data
6 : Delete on id
7 : Edit Student Data
8 : Edit Subject Data
9 : Edit Regist Data
10 : List Student Data
11 : List Subject Data
12 : List Regist Data
13 : Search Regist Data
14 : My Data

Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] :
```

หน้าต่างแสดง Menu ของโปรแกรม

```
d:\JDK\bin>java finalproject
0 : bye bye
1 : Add Student Data
2 : Add Subject Data
3 : Add Regist Data
4 : Delete Student Data
5 : Delete Subject Data
6 : Delete on id
7 : Edit Student Data
8 : Edit Subject Data
9 : Edit Regist Data
10 : List Student Data
11 : List Subject Data
12 : List Regist Data
13 : Search Regist Data
14 : My Data

Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : bye
Bye Bye
```

หากพิมพ์เลข 0 หรือ bye จะเป็นการออกจากระบบ

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 1
Student id : 101
Student name : Pit
Add Student : completely
```

เพิ่มนักเรียนโดยการใส่ ID และชื่อ

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 2
Wait subj ID : 5
Wait subj name : Law
Add Subject : completely
```

เพิ่มวิชาโดยการใส่รหัสวิชาและชื่อวิชา

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 3
Wait Student ID : 105
Wait Subject ID : 01
Wait Grade: A
Add Regist : completely
```

เพิ่มนักเรียนและรายวิชา

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 4
102,Tanawat
103,Kanchanawadee
104,Boonyada
105,Pittaya
106,James
Wait STUDENT id : 103
Delete STUDENT : completely
```

ลบนักเรียน

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 5
1,Thai
2,Math
3,English
4,Law
6,COMM
7,BCOM
01,Thai
Wait SUBJECT id : 01
Delete SUBJECT : completely
```

ลบวิชา

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 6
101,01
102,01
103,02
104,03
105,04
102,02
Wait REGIST id : 105
Delete REGIST : completely
```

ลบวิชาที่ลงทะเบียน

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 7
102,Tanawat
104,Boonyada
105,Pittaya
106,James
Wait STUDENT id : 106
Wait STUDENT name : Sames
Edit STUDENT : completely
```

แก้ไขนักเรียน

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 8
1,Thai
2,Math
3,English
4,Law
6,COMM
7,BCOM
Wait SUBJECT id : 4
Wait SUBJECT name : Social
Edit SUBJECT : completely
```

แก้ไขวิชา

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 9
101,01
102,04
103,03
104,03
102,04
Wait STUDENT ID : 102
Wait SUBJECT ID : 05
Edit REGIST : completely
```

แก้ไขการลงทะเบียน

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 10
102,Tanawat
104,Boonyada
105,Pittaya
106,Sames
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 11
1,Thai
2,Math
3,English
4,Social
6,COMM
7,BCOM
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 12
101,01
102,05
103,03
104,03
102,05
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] :
```
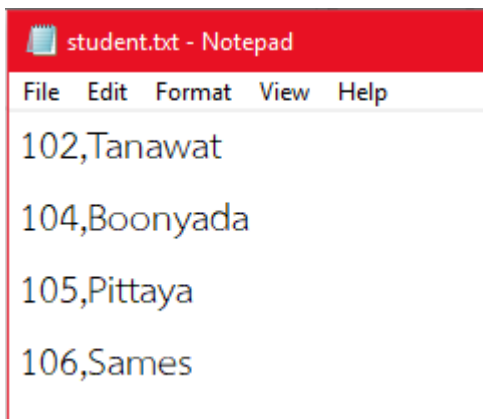
แสดง ข้อมูลการลงทะเบียน ข้อมูลนักเรียน ข้อมูลวิชา

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 13
Enter Student ID :103x
Regist Data:
Student ID:103
Subject ID:03
```

แสดงข้อมูลการลงทะเบียนตามรหัสนักเรียน

```
Wait your choice [menu, bye, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14] : 14
Pittaya Kanasin
5808311001
Nation University
Business Computer
```
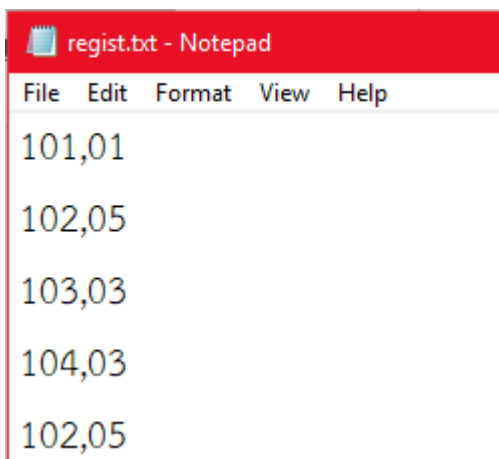
แสดงข้อมูลผู้ทำโปรแกรม

file student.txt

```
student.txt - Notepad
File  Edit  Format  View  Help
102,Tanawat
104,Boonyada
105,Pittaya
106,Sames
```
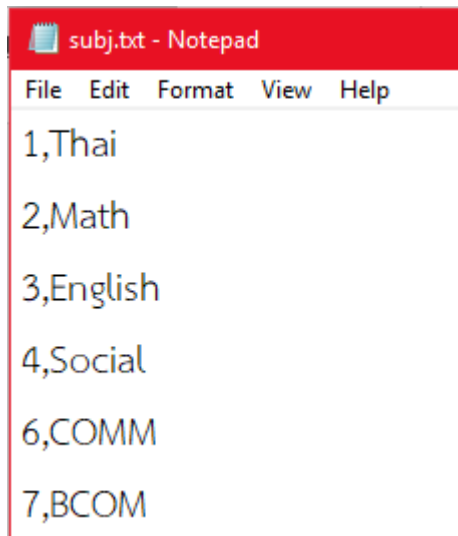
file regist.txt

```
regist.txt - Notepad
File  Edit  Format  View  Help
101,01
102,05
103,03
104,03
102,05
```

file subj.txt

```
subj.txt - Notepad
File   Edit   Format   View   Help
1,Thai

2,Math

3,English

4,Social

6,COMM

7,BCOM
```

file MyData.txt

```
MyData.txt - Notepad
File   Edit   Format   View   Help
Pittaya Kanasin

5808311001

Nation University

Business Computer
```