```
* Function *

* 1. Read File & Calurate Grade *

* 2. Statistic *

* 3. Count Grade *

* 4. Show Data *

* 5. Swap By Total *

* 6. Swap By Name *

* 7. Swap By ID *

* 8. Search By Score *

* 9. Search By Geade *

* 10. Search By Name *

* 0. Exit program *

Enter menu number = 1

Total read 53 records.

Press any key to menu . . .
```

Test case 2

ID	Name			ATTEN			
======================================	 KANYAKORN NATIPRAWAT	5.0	 27.0	 26.0		 I C	===== 2.0
57070501001		28.0	33.0	30.0	91.0	Ä	4.0
57070501004		28.0		29.0			4.0
57070501004		10.0		10.0		F	0.0
57070501008		16.0		11.0		i b	1.0
57070501009	YANISA HEMPRACHITCHAI	27.0		30.0		Ä	4.0
57070501010	THITIPHOOM CHIT-ARMARTH	30.0		30.0	99.0	Ä	4.0
57070501015	TITSANUWAN TARATORN	23.0	33.0			Ä	4.0
57070501019	BOONRIT BOONMARUENG	24.0		30.0		A	4.0
57070501022	PAWIN TAECHOYOTIN	30.0		30.0		A	4.0
57070501023	PONGPON KHAMPAN	30.0		30.0	97.0	A	4.0
57070501024	PIYAPHON TRANGJIRASATHIAN	25.0	24.0	30.0		B+	3.5
57070501026	POONYAWAT WOOTTISART	29.0	28.0	30.0		A	4.0
57070501028	PONGTORN SIRIPRAPARWAN	29.0	25.0	30.0		A	4.0
57070501029	PRUEK PAKAMATAWEE	26.0	35.0	25.0		A	4.0
57070501032	PATTARANIT KEERATIYUTTAPAISAL	29.0 26.0 18.0	36.0			A	4.0
57070501033	PHATTHASUK PIBULKONGDATE	11.0	23.0	10.0		D+	1.5
57070501035	RATIMA DAMKHAM	23.0		30.0		A A	4.0
57070501036	RAMITA LISAWATDIRATANAKUL	24.0		30.0	70.0	В	3.0
57070501037	RUTHAI CHANNIAM	10.0	27.0	29.0	66.0	C+	2.5
57070501038	WARAT KAWEEPORNPOJ	23.0		30.0	84.0	Ā	4.0
57070501039	WIROAT SAEHENG	25.0	25.0	30.0	80.0	B+	3.5
57070501040	WISARUT DUANGMORAKOT	28.0		30.0	89.0	A	4.0
57070501041		24.0	31.0		85.0	A	4.0
57070501049		20.0		30.0	75.0	В	3.0
57070501050	SUPAWIT SOMSAKUL	22.0	22.0	30.0	74.0	i B	3.0
57070501051		20.0	22.0	28.0	70.0	i B	3.0
57070501052		30.0	38.0		98.0	Ā	4.0
57070501053	SIRAPAT PHOLWA	6.0	26.0	27.0	59.0	C	2.0
57070501054		30.0	37.0	30.0	97.0	Ā	4.0
57070501056	SIRIWAT LIMWATTANA	30.0	23.0	30.0	83.0	A	4.0
57070501057	ATHICOM FAPHATHANCHAI	29.0			75.0	В	3.0
57070501058	APIWATKORN TENGKIATTRAKUL	3.0		10.0	22.0	F	0.0
57070501059	SHOTITOUCH TUANGCHAROENTIP	25.0	29.0		84.0	À	4.0
57070501061	TITAT KORBARIYACHIT	28.0				A	4.0
57070501062	NICHANAT POONSAWAT	2.0	14.0			F	0.0
57070501065	KRTT PRASARTPORNSTRTCHOKE	21.0		30.0		B+	3.5
57070501066		28.0		30.0		A	4.0
57070501067	NATTHAPHONG TIWAWONG	24.0	26.0	30.0		B+	3.5
57070501068	THANAKIT SONGSIRISUK	30.0		30.0		A	4.0
57070501069	TANAPON PRADYANANTAKUL	21.0		23.0	71.0	В	3.0
57070501070	PORASET MOONDEE	23.0		30.0	72.0	В	3.0
57070501071	PIYAPON PONGSANTISUK	22.0	21.0	30.0	73.0	В	3.0
57070501072	PALLOP BUNNAK	18.0	18.0	14.0	50.0	c	2.0
57070501073	PHITSINEE SINCHAROENPONG	22.0	18.0	30.0		B	3.0
57070501074	PAKADOL KUMPEERA	21.0	21.0	25.0	67.0	C+	2.5
57070501075	RACHASAK RAGKAMNERD	29.0	31.0	30.0		A	4.0
57070501076	LALITA BOONSAN	14.0		30.0	75.0	В	3.0
57070501077	VIMUTTI ROATKANJANAPORN	27.0		30.0	92.0	Ā	4.0
57070501078	SATIT UDOMPANICH	25.0	21.0		76.0		3.0
57070501079	SUTTIWAT SONGBOONKAEW		17.0		73.0		3.0
57070501080	AREEYA JAIAREE	27.0		30.0	84.0		4.0
57070501081	I INTOUCH SINPOONPAK	21.0	9.0	24.0	54.0		2.0

```
Function
 1. Read File & Calurate Grade
  2. Statistic
  3. Count Grade
  4. Show Data
  5. Swap By Total
  6. Swap By Name
  7. Swap By ID
  8. Search By Score
  9. Search By Geade
 10. Search By Name
  Exit program
Enter menu number = 2
  Score | Mid | Final | Atten | Total |
          2.00
 Min
                  7.00
                          10.00
                                   22.00
  Max
         30.00
                  39.00
                          30.00
                                   99.00
                 26.21
         22.36
  Mean
  SD
          7.30
                  8.05
                          6.08
                                   18.25
._____
GPA = 3.26
Press any key to menu . . .
```

Test case 4

```
Function
   1. Read File & Calurate Grade
   2. Statistic
   3. Count Grade
   4. Show Data
  5. Swap By Total
6. Swap By Name
7. Swap By ID
8. Search By Score
9. Search By Geade
10. Search By Name
   0. Exit program
Enter menu number = 3
  GRADE | A
GRADE | B+
                    104
  GRADE
                      48
  GRADE
                       8
  GRADE
                      16
  GRADE
                       4
  GRADE
  GRADE
 ress any key to menu . . .
```

Test case 5

ID	Name		FINAL				
 57070501010	THITIPHOOM CHIT-ARMARTH SIRAPOP WONGSTAPORNPAT PONGPON KHAMPAN SIRAWIT BUTMARATTHAYA PAWIN TAECHOYOTIN THANAKIT SONGSIRISUK VIMUTTI ROATKANJANAPORN KARIS MATCHAPARN RACHASAK RAGKAMNERD CHUTICHAI TUNTITHAWATCHAIKUL NGAMPOL KLANBOOT	30.0	39.0				4.6
7070501052	SIRAPOP WONGSTAPORNPAT	30.0	38.0	30.0	98.0	Α	4.6
7070501023	PONGPON KHAMPAN	30.0	37.0				4.
7070501054	SIRAWIT BUTMARATTHAYA	30.0	37.0				4.
7070501022	PAWIN TAECHOYOTIN	30.0	36.0				4.
7070501068	THANAKIT SONGSIRISUK	30.0	35.0				4.
7070501077	VIMUTTI ROATKANJANAPORN	27.0	35.0		92.0		4.
7070501003	KARIS MATCHAPARN	28.0	33.0	:	91.0	A	4.
7070501075	RACHASAK RAGKAMNERD	29.0	31.0	30.0	90.0	A	4.
7070501000	CHUIICHAI IUNIIIHAWAICHAIKUL	28.0	32.0	30.0	90.0	A A	4.
7070501004 7070501040	NGAMPUL KLANBUUT	28.0	32.0		89.0 89.0	A	4.
7070501046	MISAKUI DUANGNUKAKUI	20.0	31.0 28.0			A	4.
7070501020	POUNTAWAT WOOTTISAKT	29.0	34.0	:	87.0	A	4.
7070501033	VANTSA HEMPRACHTTCHAT	23.0	30.0	30.0		A	4.
7070501009	PRIJEK PAKAMATAWEE	26.0	35.0		86.0	Ä	4.
7070501019	BOONRTT BOONMARUENG	24.0	32.0		86.0	A	4.
7070501015	TITSANUWAN TARATORN	23.0	33.0		86.0	A	4.
7070501041	SAKAN KOMOLVATIN	24.0	31.0	30.0	85.0	A	4.
7070501061	TITAT KORBARIYACHIT	28.0	26.0	30.0	84.0	Α	4.
7070501028	PONGTORN SIRIPRAPARWAN	29.0	25.0	30.0	84.0	Α	4.
7070501038	WARAT KAWEEPORNPOJ	23.0	31.0	30.0	84.0	Α	4.
7070501032	PATTARANIT KEERATIYUTTAPAISAL	18.0	36.0	30.0	84.0	Α	4.
7070501059	SHOTITOUCH TUANGCHAROENTIP	25.0	29.0		84.0	Α	4.
7070501080	AREEYA JAIAREE	21.0	33.0	30.0	84.0	A	4.
7070501056	SIRIWAT LIMWATTANA	30.0	23.0	30.0	83.0	Α	4.
7070501039	WIROAT SAEHENG	25.0	25.0	30.0	80.0	B+	3.
7070501067	NATTHAPHONG TIWAWONG	24.0	26.0	30.0	80.0	B+	3.
7070501024	PIYAPHON TRANGJIRASATHIAN	25.0	24.0		79.0		3.
7070501065	KRIT PRASARTPORNSIRICHOKE	21.0	27.0		78.0	B+	3.
7070501078	SATIT UDOMPANICH	25.0	21.0				3.0
7070501057	ATHICOM FAPHATHANCHAI	29.0	16.0			В	3.
7070501049 7070501076	SUPANUTH UNGSUK	20.0	25.0 31.0	30.0 30.0	75.0 75.0	B B	3. 3.
7070501070	LALITA BOUNSAN	14.0	22.0	30.0	74.0	l В	3.
7070501030	SUTTINAT SONGROOMKAEN	22.0	17.0	29.0	73.0	l B	3.
7070501075	PTVAPON PONGSANTTSHK	27.0	21.0	30.0	73.0	В	3.
7070501071	PORASET MOONDEE	23.0	19.0	30.0	72.0	В	3.
7070501070	TANAPON PRADYANANTAKUL	21.0	27.0	23.0	71.0	В	3.
7070501051	SIRATEE VORATHAMTHONGDEE	20.0	22.0	28.0		В	3.
7070501036	RAMITA LISAWATDIRATANAKUL	24.0	16.0			В	3.
7070501073	PHITSINEE SINCHAROENPONG	22.0	18.0			В	і з.
7070501074	PAKADOL KUMPEERA	21.0	21.0	25.0	67.0	C+	2.
7070501037	RUTHAI CHANNIAM	10.0	27.0	29.0	66.0	C+	2.
7070501053	RACHASAK RAGKAMNERD CHUTICHAI TUNTITHAWATCHAIKUL NGAMPOL KLANBOOT WISARUT DUANGMORAKOT POONYAWAT WOOTTISART RATIMA DAMKHAM YANISA HEMPRACHITCHAI PRUEK PAKAMATAWEE BOONRIT BOONMARUENG TITSANUWAN TARATORN SAKAN KOMOLVATIN TITAT KORBARIYACHIT PONGTORN SIRIPRAPARWAN WARAT KAWEEPORNPOJ PATTARANIT KEERATIYUTTAPAISAL SHOTITOUCH TUANGCHAROENTIP AREEYA JAIAREE SIRIWAT LIMWATTANA WIROAT SAEHENG NATTHAPHONG TIWAWONG PIYAPHON TRANGJIRASATHIAN KRIT PRASARTPORNSIRICHOKE SATIT UDOMPANICH ATHICOM FAPHATHANCHAI SUPANUTH ONGSUK LALITA BOONSAN SUPAWIT SOMSAKUL SUTTIWAT SONGBOONKAEW PIYAPON PONGSANTISUK PORASET MOONDEE TANAPON PRADYANANTAKUL SIRATEE VORATHAMTHONGDEE RAMITA LISAWATDIRATANAKUL PHITSINEE SINCHAROENPONG PAKADOL KUMPEERA RUTHAI CHANNIAM SIRAPAT PHOLWA	6.0	26.0	27.0	59.0	С	2.
7070501001	KANYAKORN NATIPRAWAT	3.0	27.0	26.0	58.0	С	2.
7070501081	INTOUCH SINPOONPAK	21.0	9.0	24.0	54.0	С	2.
7070501072	PALLOP BUNNAK	18.0	18.0	14.0	50.0	C	2.
7070501033	PHATTHASUK PIBULKONGDATE	11.0	23.0	10.0	44.0	D+	1.
7070501008	CHUTIPON WONGSIRIVIPAT	16.0	9.0	11.0	36.0	D	1.
7070501006	CHAYAWUT EANGCHA-UM	10.0	7.0	10.0	27.0	F	0.
7070501062	NICHANAT POONSAWAT	2.0	14.0	10.0	26.0	F	0.0
7070501058	APIWATKORN TENGKIATTRAKUL	3.0	9.0	10.0	22.0	F	0.0

Press any key to menu . . .

Test case 6

ID	Name			ATTEN			
 57070501001		5.0	27.0	26.0	58.0	C	2.6
57070501003	KARIS MATCHAPARN	28.0	33.0	30.0	91.0	A	4.6
7070501004	NGAMPOL KLANBOOT	28.0	32.0	29.0		A	4.6
7070501006	CHAYAWUT EANGCHA-UM	10.0	7.0			F	0.6
7070501008	CHUTIPON WONGSIRIVIPAT	16.0	9.0	11.0	36.0	D	1.6
7070501009	YANISA HEMPRACHITCHAI	27.0	30.0	30.0	87.0	A	4.6
7070501010	THITIPHOOM CHIT-ARMARTH	30.0	39.0	30.0	99.0	A	4.6
7070501015	TITSANUWAN TARATORN	23.0	33.0	30.0	86.0	A	4.6
7070501019	BOONRIT BOONMARUENG	24.0	32.0	30.0	86.0	A	4.6
7070501022	PAWIN TAECHOYOTIN	30.0	36.0	30.0	96.0	A	4.6
7070501023	PONGPON KHAMPAN	30.0	37.0	30.0	97.0	A	4.6
7070501024	PIYAPHON TRANGJIRASATHIAN	25.0	24.0	30.0	79.0	B+	3.5
7070501026	POONYAWAI WOOTIISARI	29.0	28.0	30.0	87.0	A	4.6
7070501028	PONGTORN SIRIPRAPARWAN	29.0	25.0	30.0	84.0	Α	4.6
7070501029	PRUEK PAKAMATAWEE	26.0	35.0	25.0	86.0	Α	4.6
7070501032 7070501033	PROEK PAKAMATAWEE PATTARANIT KEERATIYUTTAPAISAL PHATTHASUK PIBULKONGDATE RATIMA DAMKHAM RAMITA LISAWATDIRATANAKUL	18.0 11.0	30.0	30.0	84.0 44.0	A D+	4.6 1.5
57070501033	PHATTMA DAMPHAM	23.0	23.0	10.0	87.0		1.5
7070501035	KATINA DANKHAN DAMITA LICANATOTOATANAVIII	24.0	34.0 16.0	30.0 30.0	70.0	А В	4.6 3.6
57070501037	NAMITA LISAWATDIKATANAKUL	10.0	27.0	29.0	66.0	I Б С+	2.5
57070501037	MARAT MANEEDORNDOI	23.0	31.0	30.0	84.0	l A	4.6
7070501030	WARAT KAWEEPOKNPOJ	25.0	25.0	30.0	80.0	I A I B+	3.5
7070501039	WINDAT SALTEND	28.0	31.0	30.0	89.0	l A	4.6
57070501040	SAKAN KOMOLVATIN	24.0	31.0	30.0	85.0	l A	4.6
7070501041	SUDANUTH ONGSLIK	20.0	25.0	30.0	75.0	l B	3.6
7070501049	SUPAWIT SOMSAKIII	22.0	22.0	30.0	74.0	l B	3.6
7070501050	STRATE VORATHAMTHONGDEE	20.0	22.0	28.0	70.0	l B	3.6
57070501052	STRAPOP WONGSTAPORNPAT	30.0	38.0	30.0	98.0	Ä	4.6
57070501053	STRAPAT PHOLWA	6.0	•	27.0	59.0	Ċ	2.6
57070501054	SIRAWIT BUTMARATTHAYA	30.0	37.0	30.0	97.0	Ä	4.6
7070501056	SIRIWAT LIMWATTANA	30.0	23.0	30.0	83.0	A	4.6
57070501057	ATHICOM FAPHATHANCHAI	29.0	16.0	30.0	75.0	В	3.6
57070501058	APIWATKORN TENGKIATTRAKUL	3.0	9.0	10.0	22.0	F	0.6
7070501059	SHOTITOUCH TUANGCHAROENTIP	25.0	29.0	30.0	84.0	A	4.6
57070501061	TITAT KORBARIYACHIT	28.0	26.0	30.0	84.0	A	4.6
7070501062	NICHANAT POONSAWAT	2.0	14.0	10.0	26.0	F	0.6
7070501065	RAMITA LISAWATDIRATANAKUL RUTHAI CHANNIAM WARAT KAWEEPORNPOJ WIROAT SAEHENG WISARUT DUANGMORAKOT SAKAN KOMOLVATIN SUPANUTH ONGSUK SUPANUTH ONGSUK SIRATEE VORATHAMTHONGDEE SIRAPOP WONGSTAPORNPAT SIRAPAT PHOLWA SIRAWIT BUTMARATTHAYA SIRIWAT LIMWATTANA ATHICOM FAPHATHANCHAI APIWATKORN TENGKIATTRAKUL SHOTITOUCH TUANGCHAROENTIP TITAT KORBARIYACHIT NICHANAT POONSAWAT KRIT PRASARTPORNSIRICHOKE CHUTICHAI TUNTITHAWATCHAIKUL	21.0	27.0	30.0	78.0	B+	j 3.5
7070501066	CHUTICHAI TUNTITHAWATCHAIKUL	28.0	32.0	30.0	90.0	A	4.6
7070501067	NATTHAPHONG TIWAWONG	24.0	26.0	30.0	80.0	B+	j 3.9
7070501068	THANAKIT SONGSIRISUK	30.0	35.0	30.0	95.0	A	4.6
7070501069		21.0		23.0		В	3.6
7070501070	PORASET MOONDEE	23.0		30.0	72.0	В	3.6
7070501071		22.0	21.0	30.0	73.0	B	3.6
	PALLOP BUNNAK	18.0			!	C	2.6
7070501073	PHITSINEE SINCHAROENPONG	22.0	18.0	30.0	70.0	В	3.6
7070501074	PAKADOL KUMPEERA	21.0	21.0	25.0	67.0	C+	2.5
7070501075	RACHASAK RAGKAMNERD	29.0	31.0	30.0	90.0	A	4.6
7070501076	LALITA BOONSAN	14.0	31.0	30.0	75.0	В	3.6
7070501077	VIMUTTI ROATKANJANAPORN	27.0	35.0	30.0	92.0	A	4.6
7070501078	SATIT UDOMPANICH	25.0	21.0	30.0	76.0	В	3.6
7070501079	SUTTIWAT SONGBOONKAEW	27.0	17.0	29.0	73.0	В	3.6
7070501080	AREEYA JAIAREE	21.0	33.0	30.0	84.0	A	4.6
7070501081	INTOUCH SINPOONPAK	21.0	9.0	24.0	54.0	C	2.6

Test case 8

ID	Name	MID	FINAL	ATTEN	TOTAL	GRADE	GPA
 57070501003	======================================	28.0	33.0	======= 30.0	91.0	====== A	===== 4.0
7070501004	NGAMPOL KLANBOOT	28.0	32.0	29.0	89.0	Α	4.0
7070501009	YANISA HEMPRACHITCHAI	27.0	30.0	30.0	87.0	Α	4.0
57070501010	THITIPHOOM CHIT-ARMARTH	30.0	39.0	30.0	99.0	A	4.6
7070501015	TITSANUWAN TARATORN	23.0	33.0	30.0	86.0	A	4.6
7070501019	BOONRIT BOONMARUENG	24.0	32.0	30.0	86.0	A	4.6
7070501022	PAWIN TAECHOYOTIN	30.0	36.0	30.0	96.0	A	4.6
7070501023	PONGPON KHAMPAN	30.0	37.0	30.0	97.0	A	4.6
7070501026	POONYAWAT WOOTTISART	29.0	28.0	30.0	87.0	A	4.6
7070501028	PONGTORN SIRIPRAPARWAN	29.0	25.0	30.0	84.0	A	4.6
7070501029	PRUEK PAKAMATAWEE	26.0	35.0	25.0	86.0	A	4.6
7070501032	PATTARANIT KEERATIYUTTAPAISAL	18.0	36.0	30.0	84.0	A	4.6
7070501035	RATIMA DAMKHAM	23.0	34.0	30.0	87.0	A	4.6
7070501038	WARAT KAWEEPORNPOJ	23.0	31.0	30.0	84.0	A	4.0
7070501040	WISARUT DUANGMORAKOT	28.0	31.0	30.0	89.0	A	4.0
7070501041	SAKAN KOMOLVATIN	24.0	31.0	30.0	85.0	A	4.6
7070501052	SIRAPOP WONGSTAPORNPAT	30.0	38.0	30.0	98.0	A	4.6
7070501054	SIRAWIT BUTMARATTHAYA	30.0	37.0	30.0	97.0	A	4.6
7070501056	SIRIWAT LIMWATTANA	30.0	23.0	30.0	83.0	A	4.6
7070501059	SHOTITOUCH TUANGCHAROENTIP	25.0	29.0	30.0	84.0	A	4.6
7070501061	TITAT KORBARIYACHIT	28.0	26.0	30.0	84.0	A	4.6
7070501066	CHUTICHAI TUNTITHAWATCHAIKUL	28.0	32.0	30.0	90.0	A	4.6
7070501068	THANAKIT SONGSIRISUK	30.0	35.0	30.0	95.0	Α	4.0
7070501075	RACHASAK RAGKAMNERD	29.0	31.0	30.0	90.0	A	4.6
7070501077	VIMUTTI ROATKANJANAPORN	27.0	35.0	30.0	92.0	Α	4.6
7070501080	AREEYA JAIAREE	21.0	33.0	30.0	84.0	A	4.6
earch Grade	(A, B+, B, C+, C, D+, D, F (0 = Exit) b+						
TD	 Name	MID	FINAL	ATTEN	TOTAL	GRADE	===== GP#
							====;
7070501024	PIYAPHON TRANGJIRASATHIAN	25.0			79.0		3.
7070501039	WIROAT SAEHENG	25.0	25.0	30.0	80.0	B+	3.
7070501065	KRIT PRASARTPORNSIRICHOKE	21.0	27.0	30.0	78.0	B+	3.
7070501067	NATTHAPHONG TIWAWONG	24.0	26.0	30.0	80.0	l B+	1 3.5

```
Function
   1. Read File & Calurate Grade
   2. Statistic
   3. Count Grade
   4. Show Data
  5. Swap By Total
6. Swap By Name
7. Swap By ID
8. Search By Score
9. Search By Geade
10. Search By Name
   0. Exit program
Enter menu number = 10
Enter Search key (0 = Exit) : pon
                                                                            | MID | FINAL | ATTEN | TOTAL | GRADE | GPA |
       ID
                                                 Name
  57070501008 | CHUTIPON WONGSIRIVIPAT
                                                                                                                 36.0
                                                                                 16.0
                                                                                            9.0
                                                                                                      11.0
                                                                                                                                     1.0
                    PONGPON KHAMPAN
                                                                                           37.0
  57070501023
                                                                                 30.0
                                                                                                       30.0
                                                                                                                 97.0
                                                                                                                                     4.0
  57070591028 | PONGTORN SIRIPRAPARWAN
57070591069 | TANAPON PRADYANANTAKUL
57070501071 | PIYAPON PONGSANTISUK
57070501073 | PHITSINEE SINCHAROENPONG
                                                                                           25.0
27.0
                                                                                                                                     4.0
                                                                                 29.0
                                                                                                       30.0
                                                                                                                 84.0
                                                                                 21.0
                                                                                                      23.0
                                                                                                                 71.0
                                                                                                                                     3.0
                                                                                22.0
                                                                                                                 73.0
                                                                                           21.0
                                                                                                      30.0
                                                                                                                                     3.0
                                                                                22.0
                                                                                           18.0
                                                                                                      30.0
                                                                                                                 70.0
                                                                                                                                     3.0
 Enter Search key (0 = Exit) : 0_
```

ผลการประเมิณตนเอง : 4