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Lab 1
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CIS 41B
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```
Driver code that uses Scores class to implement functions
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'''
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```
from scores import Scores
```

```
# main() creates Scores object, reads the input file, and loops through  
the menu options
```

```
# call functions
```

```
def main():
```

```
    s1 = Scores("input1.txt")
```

```
    s1.readFile()
```

```
    while True:
```

```
        menu_options =
```

```
[0, printByTotal, printByLimit, generateCountry, printByFrequency, 5]
```

```
        menu_choice = displayMenu()
```

```
        if menu_choice == 5:
```

```
            break
```

```
        menu_options[menu_choice](s1)
```

```
# Prints menu option and validates user's input, returns the user's input  
as an int
```

```
def displayMenu():
```

```
    print("\n1. Print by total score\n2. Print by limit\n3. Print one\n4.  
Print score frequency\n5. Quit")
```

```
    user_choice = int(input(">> Enter your choice:"))
```

```
    while user_choice < 1 or user_choice > 5:
```

```
        print("Error: Invalid Input")
```

```
        user_choice = int(input(">> Enter your choice:"))
```

```
    return user_choice
```

```
# Uses Scores object and its function to print the total score in  
ascending order
```

```
def printByTotal(s1):
```

```
    s1.total_scores()
```

```
# Prompts user for a limit and whether they want to go above or below to  
pass into function
```

```
def printByLimit(s1):
```

```
    limit = input("Enter a score limit:")
```

```
    a_b = input("Above or below {}? (a/b):".format(limit))
```

```
    if a_b == 'a':
```

```
        s1.score_limit(limit, True)
```

```
    elif a_b == 'b':
```

```
        s1.score_limit(limit)
```

```
# Uses Score object to call function that checks the frequency of the
scores
def printByFrequency(s1):
    s1.score_frequency()

# Generates a country and its scores upon pressing the enter key, and
pressing any
# other key will exit the function
def generateCountry(s1):
    while True:
        user_input = input("Press enter key to print a country record, or
enter any character to end: ")
        if user_input == '':
            s1.generate_country()
        else:
            break

main()    #call to main()
```