```
# Open a file
fo = open("data.txt", "w") # this file is in current directory
fo.write("Python is a great language.")

# Close open file
fo.close()
```

```
# File IO demonstration

filename = input("Enter the file name full path: ")
print ("The file name you have entered is ", filename)

file1 = open(filename, "w")
radius = 1.5
area = radius * 3.132 * 3.142
file1.write("With radius = %.2f, the area = %.2f" % (radius, area))

file1.close()
```

Sample of running program

```
Enter the file name full path: c:\\temp\\data2.txt
The file name you have entered is c:\\temp\\data2.txt
```

Example – running program on MAC

Enter the file name full path: /Users/staff/downloads/data2.txt

The file name you have entered is: /Users/staff/downloads/data2.txt

You can also enter using a single slash symbol:

Enter the file name full path: c:\temp\data2.txt

The file name you have entered is c:\temp\data2.txt

```
# Example program on File I/O
def main():
    # Open file for output on C drive under temp directory
    outfile = open("c:\\temp\\Presidents.txt", "w")

    # Write data to the file
    outfile.write("Bill Clinton\n")
    outfile.write("George Bush\n")
    outfile.write("Barack Obama")

   # Close the output file
   outfile.close()

main()
```

```
#This program reads the line in the input file and writes that
#line to an output file.  A text line is also appended to the
#ouput file.

def main():
    #open the existing data.txt file as input file
    inputFile = open("C:\\temp\\data.txt", "r"))

        #create new result.txt file as output file
    outputFile = open("C:\\temp\\results.txt", "w")

        #read one line from inputFile and write the line to outputFile
    for line in inputFile:
         outputFile.write(line + "\n")


        #Append a line of text to outputFile
    outputFile.write("Computer Programming is exciting!\n")

    inputFile.close()
    outputFile.close()

main()
```

```
import os

def main():
   # Prompt the user to enter filenames
```

```
    f1 = input("Enter a filename: ").strip()
    if os.path.isfile(f1):
        # Open files for input
        infile = open(f1, "r")

        s = infile.read() # Read all from the file

        scores = [ eval(x) for x in s.split() ]
        print(scores)

        print("There are ", len(scores), " scores")
        print("The total is ", sum(scores))
        print("The average is ", sum(scores) / len(scores))
        infile.close()
    else:
        print ("Failed to open file!")

main()
```

```
# Read from file that contain name and two scores per line.
# Print the name and the average score
#
import os

def main():
    # Prompt the user to enter filenames
    f1 = input("Enter a filename: ").strip()
```

```
    if os.path.isfile(f1):
        # Open files for input
        infile = open(f1, "r")

        line = infile.readline() # Read a line
        while line != '': # read until end-of-file
            splitLine = line.split()
            t1 = eval(splitLine[2])
            t2 = eval(splitLine[3])

            #print name and average
            print(splitLine[0], " ", splitLine[1], (t1+t2)/2)

            #read next line
            line = infile.readline() # Read next line from file

        infile.close()
    else:
        print ("Failed to open file!")

main()
```