2) File Head Display

```
file = input("input filename (including extension): ")
count=0
for line in reversed(list(open(file))):
    if count < 5:
        print(line.rstrip())
        count+=1
```

3) Line Numbers

```
file = input("input filename (including extension): ")
count = 1
with open(file) as f:
    for line in (f):
        print("%s) %s" % (count, line))
        count +=1
```

4) Item Counter

```
file = 'names.txt'
count = 0
with open(file) as f:
    for line in (f):
        count +=1
print (count)
```

5) Sum of Numbers

```
file = 'numbers.txt'
count = 0
with open(file) as f:
    for line in (f):
        count += int(line)
print (count)
```

6) Average of Numbers

```
file = 'numbers.txt'
avg = 0
```

```
count = 0
with open(file) as f:
    for line in (f):
        avg += int(line)
        count +=1
print (avg/count)
```

7) Random Number File Writer

```
numLen = input("how many random numbers do you want?: ")
import random
file = 'random.txt'

with open(file,'w') as f:
    for i in range(int(numLen)):
        rndm = random.randint(1,500)
        f.write(str(rndm)+"\n")
```

8) Random Number File Reader

```
file = 'random.txt'
total = 0
count = 0
with open(file) as f:
    for line in (f):
        total += int(line)
        count +=1
print (total)
print ("The number of random numbers is: " + str(count))
```

9) Exception Handling

```
file = 'numbers.txt'
avg = 0
count = 0
with open(file) as f:
    try:
        for line in (f):
            avg += int(line)
            count +=1
    except IOError:
```

```
    print('An error occured trying to read the file.')

except ValueError:
    print('Non-numeric data found in the file.')

finally:
    print (avg/count)
```