

## Exercise # 3 Solution

(10-10-2001)

### Exercise 1

AB

\*\*413 is the value of n

\*\*\*21.8 is the value of y

### Exercise 2

a. x is \*\*\*24

b. x is \*\*\*24.38

c. x is 24

d. x is \*\*2e+01

### Exercise 3

```
#include <iostream.h>
```

```
#include <fstream.h>
```

```
int main ()
```

```
{  
    float number, sum = 0;           /* declaring and intializing */  
    ifstream inFile("numbers.dat"); /* opening the file for reading*/  
    inFile >> number;               /* reading from the file */  
  
    while(!inFile.eof())            /* testing for end of file */  
    {  
        /* performing the summation and reading next number */  
        sum = sum + number;  
        inFile >> number;  
    }  
  
    /* displaying the value of sum */  
    cout << "The sum is " << sum << endl;  
    return 0;  
}
```

### Exercise 4

Errors in the program are as follows:

1. The preprocessor directive `#include <fstream.h>` is missing
2. The declaration of `outData` is missing:  
`ofstream outdata;`
3. The opening of the input file is missing:  
`inData("myfile.dat");`
4. The statement  
`cin >> n;`  
does not read from the input file. Change `cin` to `inData`.

### Exercise 5

- int1 contains 17, int2 contains 13, and int3 contains 7.
- The leftover values remain waiting in the input stream. These values will be read by subsequent input statements (or they will be ignored if no more input statements are executed).

### Exercise 6

Fill in the missing information in the table below!

i, j are int variables; a, b are char variables; and f, d are float variables

Statement	Data	Contents after input
<code>cin &gt;&gt; i &gt;&gt; j &gt;&gt; f;</code>	1 2.5	i = 1, j = 2, f = 0.5
<code>cin &gt;&gt; i &gt;&gt; j &gt;&gt; f;</code>	12.5	i = 12 (failed for j and f)
<code>cin &gt;&gt; f &gt;&gt; a &gt;&gt; b &gt;&gt; i;</code>	12.5A35	f = 12.5, a = 'A', b = '3', i = 5
<code>cin &gt;&gt; f &gt;&gt; a &gt;&gt; b &gt;&gt; i;</code>	16.8.45	f = 16.8, a = '.', b = '4', i = 5
<code>cin &gt;&gt; a &gt;&gt; i &gt;&gt; f;</code>	234.62	a = '2', i = 34, f = 0.62
<code>cin &gt;&gt; i &gt;&gt; b &gt;&gt; a &gt;&gt; f;</code>	12 45.	i = 12, b = '4', a = '5' (failed for f)
<code>cin.ignore(5, 'd');</code> <code>cin &gt;&gt; a;</code>	hello world	a = 'w'
<code>cin &gt;&gt; i;</code> <code>cin.get(a);</code> <code>cin &gt;&gt; j;</code>	12.39	i = 12, a = '.', j = 39