Figure 14.2 The marks example, completed.

Let’s rewrite our code using the **Mark** class hierarchy.
First, load the **markList** Vector:

```
Vector markList = new Vector();
while (true) {
    String mark = keyb.readLine();
    if (mark.equals("quit")) break;
    System.out.print("letter grade?  (y/n) ");
    Mark m;
    if (keyb.readLine().equals("y"))
        m =
    else
        m =
    markList.addElement(m);
}
```

and to find the average:

```
int count = 0;
int sum = 0;
for (int i = 0; i < markList.size(); i++) {
    Mark m = (Mark)markList.elementAt(i);
    sum += m.intValue();
    count++;
}
System.out.println("The average is " + sum/count);
```

Java is able to determine the subclass to which **m** belongs,
and invokes the particular **intValue()** method of that subclass.

We are now using *inheritance*!