Tampere University of Technology
Software Systems Lab
Programming I

Exercise Sheet # 1 - Solution

(26-09-2001)

Exercise 1:

Mark the following identifiers either valid or invalid.

a. item#1 **invalid**
b. data **valid**
c. y **valid**
d. 3set **invalid**
e. PAY_DAY **valid**
f. bin-2 **invalid**
g. num5 **valid**
h. Sq Ft **invalid**

Exercise 2:

Which of the following are reserved words and which are programmer-defined identifiers?

a. char **reserved**
b. sort **programmer-defined**
c. INT **programmer-defined**
d. long **reserved**
e. Float **programmer-defined**

Exercise 3:

If valid, what is printed by each of the following program fragments:

a.
```
char ch = `F';
cout << ch;
```
F

b.
```
char ch = `A';
ch++;
cout << ch;
```
B

c.
```
char ch = `\x555';
cout << ch;
```
invalid

d.
```
int num = 0x16;
cout << num;
```
22

e.
```
int num = 13.5;
cout << num;
```
invalid

f.
```
float num = 13;
cout << num;
```
13

Exercise 4:

True or False?

a. If you have written your own header file named mytypes.h, then the preprocessor directive

#include <mytypes.h>

is the correct way to insert the contents of the header file into a program. **False**

b. Formatting a program incorrectly causes an error. **False**

c. In imperative languages, changing the order of statements always changes the meaning of the program. **False**

Exercise 5:

Given the following declarations,
enum Perfumes {POISON, DIOR_ESSENCE, CHANEL_N0_5, COTY};
Perfumes sample;
indicate whether each statement below is valid or invalid.

a. sample = POISON; **valid**
b. sample = 3; **invalid**
c. sample++; **invalid**
d. sample = Perfumes(sample + 1); **valid**