Book Exercises 3.6 and 3.7

Note: From next week, use the textbook for exercises' content.

3.6: *In the past, Australia had coins in denominations of 50c, 20c, 10c, 5c, 2c, and 1c. Write a program that reads an integer amount of cents between 0 and 99 (your program might check for valid input) and print out the coins necessary to make up that amount of money.*

3.7: *Extend your "Fahrenheit to Celsius" program by adding in the reverse transformation. For example:*

```
H:>converter
Enter a temperature: 212C
The temperature 212.0C converts to 413.6F
```

How about extending further for more units: M (miles), K (kilometers), P (Pound), G (kilogram)?

Quiz 1

If we execute the following fragment:

```
int i;  char c; float x;
scanf("%d%c%f", &i, &c, &x);
```

with the input stream (data from keyboard) of:

```
  100.1A200.2
```

Then, the value of `i`, `c`, *and* `x` *become respectively:*

A: `100  A  200.2`	**B:** `100.1  A  200.2`
C: `100  .  1`	**D:** `(something else)`

Quiz 2

What **xxx** *should be in the following fragment:*

```
printf("Enter value for a and b : ");
if ( scanf("%d%d",&a,&b) xxx ) {
  printf("Please enter 2 integers\n");
  exit( EXIT_FAILURE );
}
```

A: `!= 0`	**B:** `!= 2`
C: `== 1`	**D:** `== 2`

Quiz 3

What is the output of the following fragment:

```
int a=1, b=2;
if ( a = b ) {
  printf("a= %d ", a);
} else {
  printf("b= %d", b);
}
printf("\n");
```

A: a= 1 b= 2	**B:** a= 1
C: a= 2	**D:** b= 2

Ex 3.6 (Design)

In the past, Australia had coins in denominations of 50c, 20c, 10c, 5c, 2c, and 1c. Write a program that reads an integer amount of cents between 0 and 99 (your program might check for valid input) and print out the coins necessary to make up that amount of money. For example:

```
H:>calculatechange
Enter amount in cents: 93
The coins required to make 93 cents are:
50, 20, 20, 2, 1
```

Note: Don't worry if your program seems a bit clumsy, and not terribly general!

Remember

if (<*condition*)) { … } else { … }

```
if (scantf(%d%d",&a,&b) != 2) {
    printf("invalid input\n");
    exit(EXIT_FAILURE);
}
```

x= a>b? a, b;

= *condistion*? *expression1*, *expression2* ;

```
#define EPSILON 1e-6
#define MYNAME "Mr Bean"
```