The following sets of program statements contain one or more errors that prevent the program from even compiling. Find the errors and show how they may be fixed.

a)  
```c
int i;
float x[5];
for( i=0, i<5, i++ )
    x[i] = 0;
```

b)  
```c
int i;
float x[100];
for( i=0; i<100; i++ )
    x[i+1] = x[I] + 2;
```

c)  
```c
float i = 2.3;
x[i] = 0;
```

d)  
```c
int i;
float x[10];
for( i=0; i<5; i++ )
    x[i] = 10 / i;
```

For the following sets of program statements, the program will run but does not produce the desired or expected result. Find and fix the errors.

a)  
```c
// Print out every tenth value in the array N
int i;
float N[100];
for( i=0; i<100; i++ )
    printf( "For row %i, N is %i\n", i, N[i] );
```

b)  
```c
// Create 10 random numbers between 0 and 1 and save them into the array x
int i;
float x[10];
srand( time( NULL ) );
for( i=0; i<10; i++ )
    x[i] = rand();
```

c)  
```c
// Add 3 to the value of N and then multiply the sum by i
N = N + 3 * i;
```
Suppose that you had entered this program for your exponential growth model:

```c
// Exponential growth model
#include <stdheaders.h>

int main( void )
{
    int i;
    float k, dN, dt
    float N[11], t[11];

    k = 0.4;
    t = 0;
    N[0] = 2;
    dt = 1.0;

    for( i=0; i<10; i++ )
    {
        dN = k * N[i] * dt;
        N[i+1] = N[i] + dN;
        t[i+1] = t[i] + dt;
    }

    for( i=0; i<=10; i++ )
    {
        print( "At time %4.1f, N = %7.4f\n", t[i], N[0] );
    }
}
```

You try to compile the program and receive the following error information:

```
Error d:\icc\projects\test\test.c: 10 Syntax error: missing semicolon before 'float'
Error d:\icc\projects\test\test.c: 13 operands of 'array' have illegal types 'array' and 'int'
Error d:\icc\projects\test\test.c: 13 the left hand side of the assignment can't be assigned to
Warning d:\icc\projects\test\test.c: 25 missing prototype for print
Warning d:\icc\projects\test\test.c: 23 missing return value
Compilation + link time:0.5 sec, Return code: 1
```

First, show how you would fix all of these errors.

Next, assume that you have fixed all the errors and you run the program, but the displayed results give a value of 2.0 for the population size at all times. What is wrong with the program?