

Suppose there is a standard C library *trig.h* which contains the trigonometric functions *float cos(float x)*, *float sin(float x)*, and *float tan(float x)* and the defined constant *float pi* (= 3.141592).

Unfortunately *x* must be in radians.

Write a small library file *mytrig.c* and header *mytrig.h* for *d_cos(float angle)*, *d_sin(float angle)*, and *d_tan(float angle)* where *angle* is in degrees.

```
#include <trig.h>
// converts trig.h functions to work
// with angles given in degrees
// Mike Coombes 2005/01/05

float d_cos(float angle_in_degrees);
float d_sin(float angle_in_degrees);
float d_tan(float angle_in_degrees);
```

MyTrig.h

```
#include "mytrig.h"
// converts angle_in_degrees to
// radians for trig.h functions to work
// Mike Coombes 2005/01/05

float d_cos(float angle_in_degrees)
{
    angle_in_degrees *= pi/180;
    return cos(angle_in_degrees);
}

float d_sin(float angle_in_degrees)
{
    angle_in_degrees *= pi/180;
    return sin(angle_in_degrees);
}

float d_tan(float angle_in_degrees)
{
    angle_in_degrees *= pi/180;
    return tan(angle_in_degrees);
}
```

MyTrig.c