Functions continued

1E3
Topic 9a

Function to check if y is a leap year?

A. int ly (int y);
B. bool ly (int y);
C. char ly (int y);
D. None of these
Function to compute area of a circle?

A. int ca (int r)
B. double ca (int r)
C. bool ca (double r)
D. double ca (double r)

Design fn prototypes/declarations for:
- rect_area returns area of a rectangle
- grade turns a % into a leaving cert grade
- points turns a leaving cert grade into CAO points. How could you handle bonus maths points?
- month_length returns the number of days in the given month; has to deal with February!!.
Programming exercises

- Value at x of a quadratic equation defined by a, b, c
- Daynumber
- Prime testing function
- Payroll program using functions for pay and tax

Compute “discover (1, 5)”

```
int discover (int one, int two) {
    int secret = 0;
    for (int i = one; i <= two; i++)
        secret = secret + i * i;
    return secret;
}
```

A. 25
B. 30
C. 55
D. 16
#include <iostream>
using namespace std;

double f (double x, int y);

int main (){
    cout << f(10,4) << "\n";
    return 0;
}

double f (double x, int y) {
    if (y==0)
        return 1;
    else
        return (x * f (x, y-1));
}

- **ADVANCED EXERCISE**
- What does this program print?
- What does the function f compute?