Workflow

Name:	02.01
Points:	3 pts
Deadline:	02/24
Prerequisite(s):	none

Main

1. Create a spreadsheet named **w0201.xls** that generates a runtime table for each of the following functions for a worst-case scenario. Furthermore, for each function state what represents n. Use the floor and/or ceiling functions when needed.

```
01  bool A(int n)
02  {
03    if(n <= 1)
04    {
05      return false;
06    }
07
08    for(int i = 2;i * i <= n;i += 1)
09    {
10      if(n % i == 0)
11      {
12        return false;
13      }
14    }
15    return true;
16  }
17
18
19
20
21
22
23
24
25
26
27
```

```
int B(int data[],int n,int t,int c)
{
  for(int i = 0;i < n;i += 1)
  {
    if(data[i] == t)
    {
      return 1;
    }
    else if(data[i] == c)
    {
      return 2;
    }
  }
  return 0;
}
```

```
double C(double data[],int n)
{
  double m = data[0], t;

  if(m < data[n-1])
  {
    m = data[n-1];
  }

  for(int i = 1;i <= n/2;i += 1)
  {
    if(data[i] > data[n-(i+1)])
    {
      t = data[i];
    }
    else
    {
      t = data[n-(i+1)];
    }

    if(m < t)
    {
      m = t;
    }
  }
  return m;
}
```

2. Create a text file named **runtime.txt** that provided the runtime function for each of the above functions.