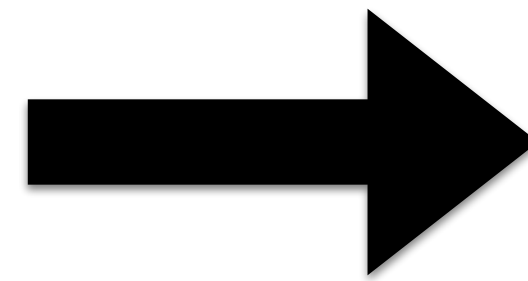
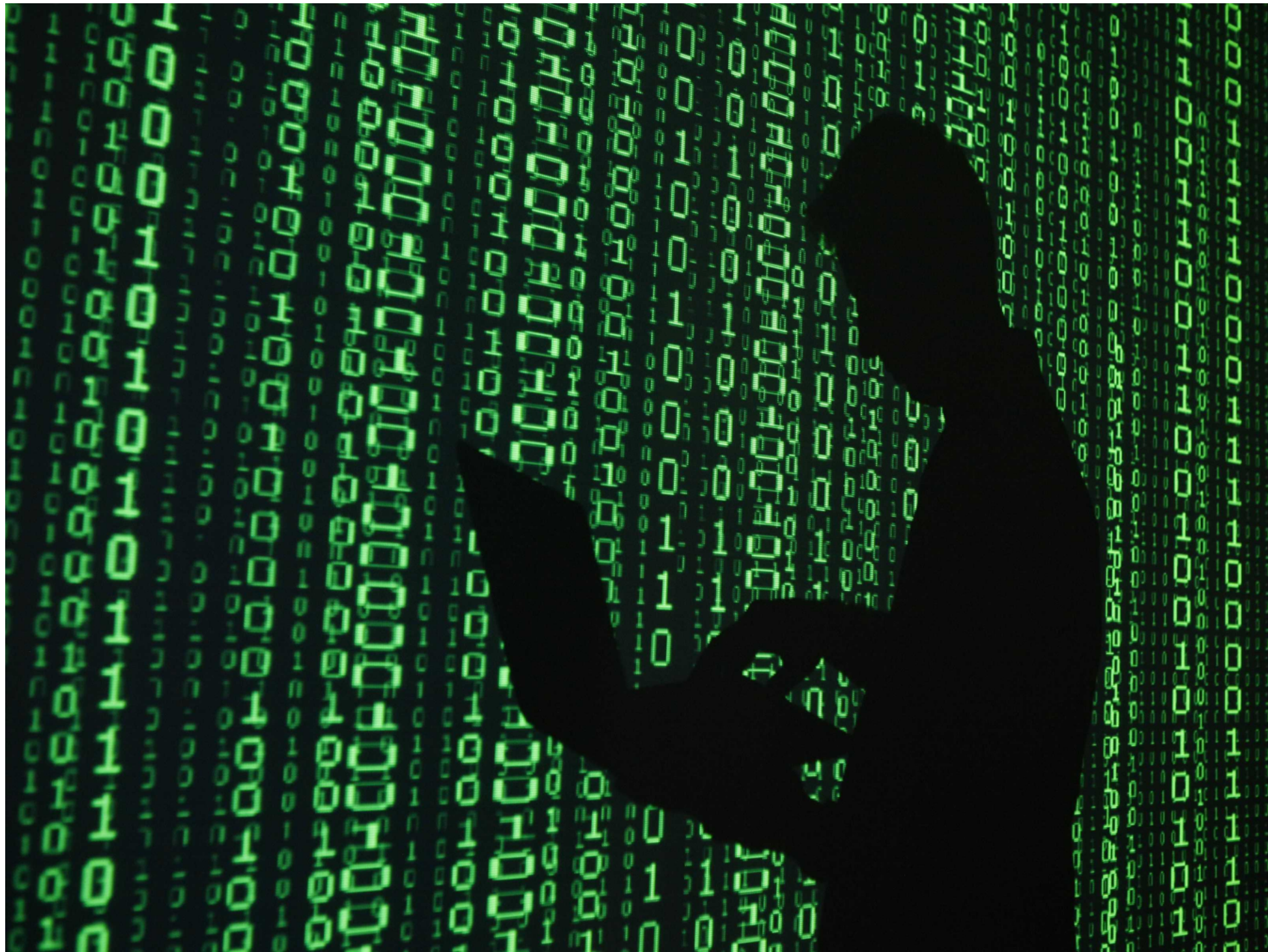


# CSE 504: Project Proposal

Jennifer Niederländer  
01/13/2016



# Improving Security Testing

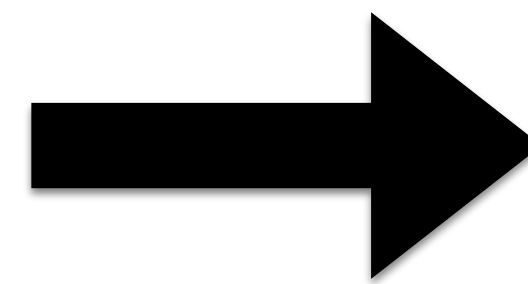
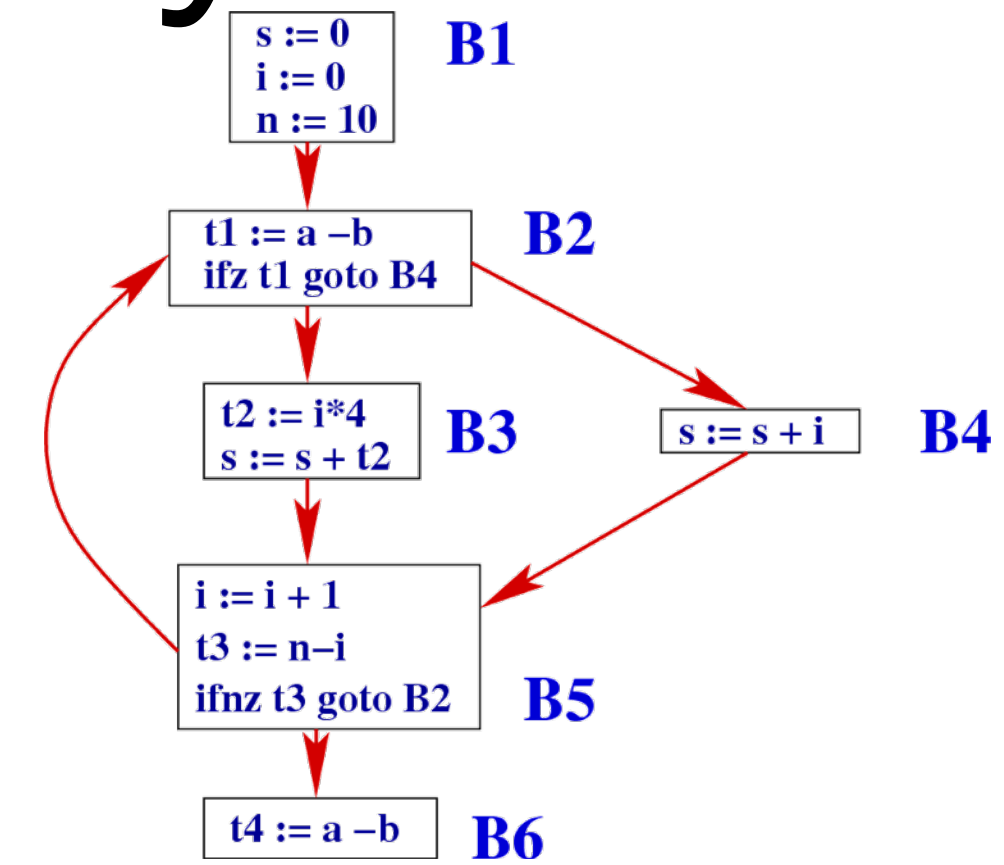




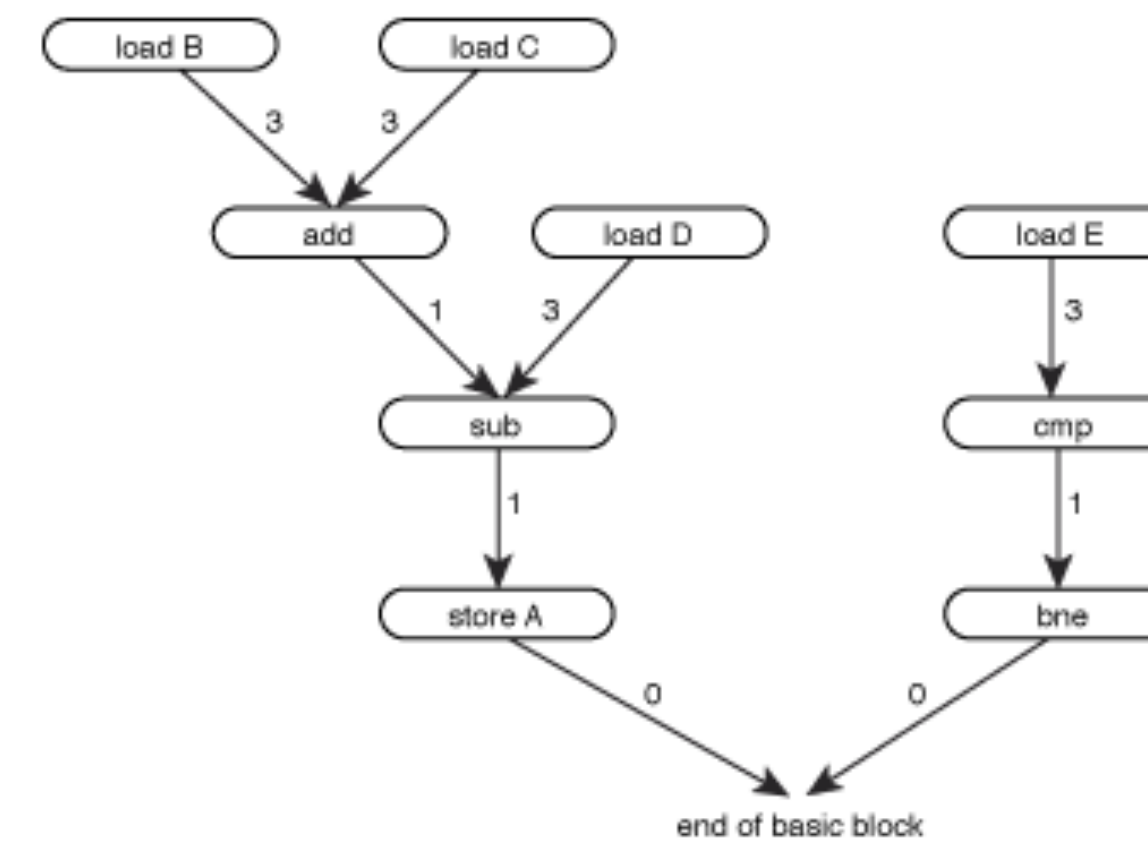
# Improving Security Testing



Collect security errors



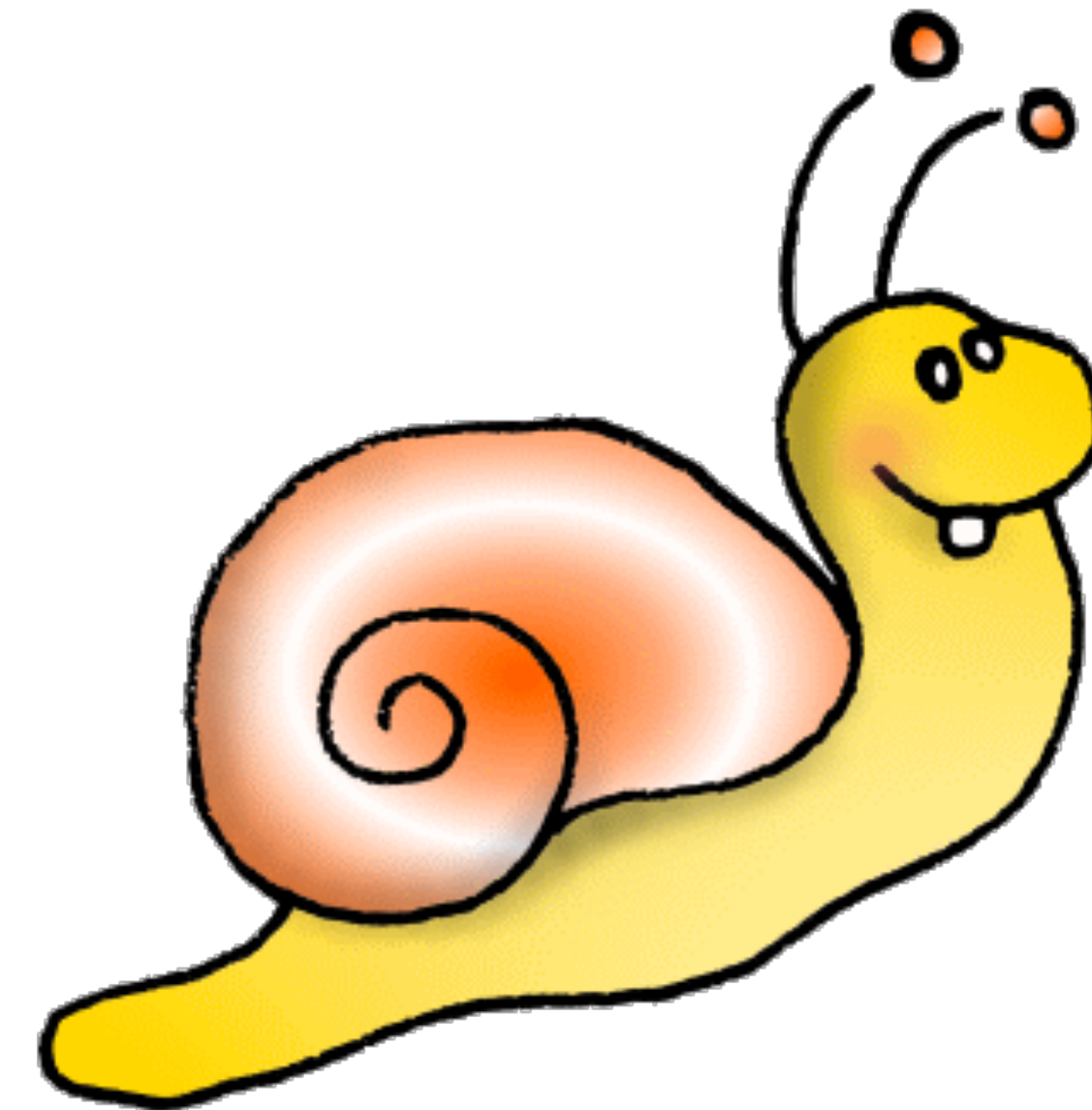
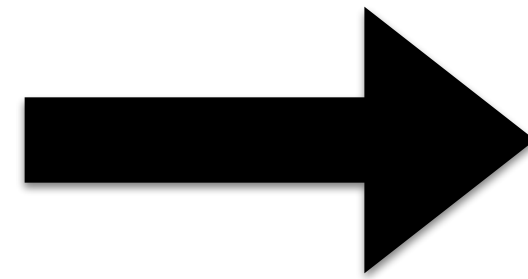
or



Derive Patterns

# Improving Performance

```
public class TcpClientSample
{
    public static void Main()
    {
        byte[] data = new byte[1024]; string input, stringData;
        TcpClient server;
        try{
            server = new TcpClient(" . . . . ", port);
        }catch (SocketException){
            Console.WriteLine("Unable to connect to server");
            return;
        }
        NetworkStream ns = server.GetStream();
        int recv = ns.Read(data, 0, data.Length);
        stringData = Encoding.ASCII.GetString(data, 0, recv);
        Console.WriteLine(stringData);
        while(true){
            input = Console.ReadLine();
            if (input == "exit") break;
            newchild.Properties["ou"].Add
            ("Auditing Department");
            newchild.CommitChanges();
            newchild.Close();
        }
    }
}
```





# Improving Performance

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1. Take the code
2. Point out potential slow code
3. Suggest how to improve these segments

# Improving Performance

```
for(int i=1; i<=10; ++i)
    DoSomething(i);
```

1. Take the code
2. Point out potential slow code
3. Suggest how to improve these segments

# Improving Performance

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for(int i=1; i<=10; ++i)  
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```

```
DoSomething(n);
```

1. Take the code
2. Point out potential slow code
3. Suggest how to improve these segments

# Improving Performance

```
for(int i=1; i<=10; ++i)  
    DoSomething(i);
```

```
DoSomething(n);
```

1. Collect data about performance issues
2. Collect data how these issues were solved
3. Develop patterns



# Sources

- <http://www.businessinsider.com/nsa-trained-snowden-to-hack-2013-7>
- <http://www.tnooz.com/article/hotel-security-under-question-as-hacker-says-electronic-locks-can-be-opened/>
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- <http://www.csd.uwo.ca/~moreno/CS447/Lectures/CodeOptimization.html/node6.html>
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- [http://www.thegeekstuff.com/2015/01/c-cpp-code-optimization/?utm\\_source=feedburner&utm\\_medium=email&utm\\_campaign=Feed%3A+TheGeekStuff+\(The+Geek+Stuff\)](http://www.thegeekstuff.com/2015/01/c-cpp-code-optimization/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+TheGeekStuff+(The+Geek+Stuff))