

Part I:

The malware is triggered on April 25, 2016.

It then drops a file called "possible_names.txt".

The contents of this file are possible trigger file names encrypted using ROT13 (a very common method of encryption used by malware).

These filenames are all real malware file names (except for the trigger name).

Contents of "possible_names.txt":

```
jvaqrsraqre.rkr  
gnfxzba.rkr  
oybbqerq.rkr  
inovna.iof  
Bhgybbx.rkr  
Zrffntr.rkr  
YBIR_YRGGRE_SBE_LBH.rkr  
Qbphzragf.rkr  
Zvpebfbsg_Hcqngr.rkr  
jva-sverjnny.rkr  
nqborsynfu.rkr  
qrfxgbc.rkr  
wnin.rkr
```

Decrypted contents of "possible_names.txt":

```
windexer.exe  
taskmon.exe  
bloodred.exe  
vabian.vbs  
Outlook.exe  
Message.exe  
LOVE_LETTER_FOR_YOU.exe  
Documents.exe  
Microsoft_Update.exe  
win-firewall.exe  
adobeflash.exe  
desktop.exe  
java.exe
```

The trigger filename is "Outlook.exe"

Once the malware has the proper filename, it then drops a file called "crack-me.txt"

This is a list of 4 MD5 hashes that the student has to crack.

Since MD5 has been broken, it's pretty easy to find an online MD5 cracker to crack each hash (e.g., <http://md5cracker.org/>)

Contents of "crack-me.txt":

```
639bae9ac6b3e1a84cebb7b403297b79
7b63d1cafe15e5edab88a8e81de794b5
8fc42c6ddf9966db3b09e84365034357
c8d46d341bea4fd5bff866a65ff8aea9
```

Cracking the 4 MD5 hashes reveals the 3 strings "you", "won", "the", "game".

Online form submission solutions:

String 1: you
String 2: won
String 3: the
String 4: game

Part II:

There are three different malware base source codes used to construct the 8 malware samples (malware1, malware2, malware3, malware4, malware8, malware9, malware11, TriggerMeTimbers).

One is a VBS worm, another is a Point-of-Sale (POS) malware, and the last is another POS malware.

The students are tasked with simply categorizing each sample they ran in Phases I/II plus this bonus malware.

Online form submission solutions:

Note: The categories should be unnamed. Using the labels category1, category2, and category3 is good enough. So students can group the malware under whatever category label they would like, so long as the **same malware** is grouped together.

Category 1 (VBS worm) : malware2
Category 2 (Dexter POS) : malware1, malware3 (uses a vbs script to do sneaky things but is still Dexter at its core), malware4, malware8
Category 3 (Alina POS) : malware9, malware11, TriggerMeTimbers