

[ANSWERS] THE DREAMHACK GAME WINTER 2009

STAGE ONE

1. Fill in the blanks

Dog + bag = **doggybag**.

2. What language is this?

The first paragraph was hex telling you that the password was found by decoding the binary, which made out the word **encoding**.

3. Patterns and Google

The pattern you were supposed to find, was the time 11.40 pm, and the date 14th of April, 1912. If googled for, you found out that this was the exact time and date of the sinking of **Titanic**.

4. Follow my lead

By retracing the steps of where the movie clip was filmed, you ended up in Hall B, behind the tank. On the wall it said DHG is under **siege**.

5. Unlimited Copies!!

The key in this task was to realize that "South department" was the Info booth in Hall D. By asking the Info guys for a password, without mentioning DHG, they would have given you **9438**.

6. Look into the stars

Each star had exactly 26 inner lines, just as the alphabet has 26 letters. If the top line was A, then the rotation of the star to an inner line pointed out each letter making up the word **egypt**.

7. The Kidnapping

The title was a link to an mp3 file containing lots of numbers read by three different voices. Instead of trying to copy them down, you were supposed to notice the album art metadata and identify the photo as taken in the south entrance. There, underneath the counter, was a telephone number. If you called the number, you heard beeps which were Morse code for "sound.dhgame.eu." Browsing there gave you another mp3 file containing a frightened voice. The poor, kidnapped girl who tried to describe the path her kidnappers dragged her gave several clues to her final destination. On top of the stairs outside the south entrance were five stones. On one of the stones the sculptor's name said R-K-Zon -90, or on a bench there was a note with the word **lolium**.

8. RFC

The title was "Raman Frequency Counter". If you googled for this you would find out it was nothing that really existed. Thus, the abbreviation RFC was more interesting. Combined with 854, giving RFC854, this is a standard for the telnet protocol. By putting dots between the remaining given numbers, but using 458 as port, you could telnet to the IP and play a mastermind-ish game. If you managed to guess the unknown numbers, you were given the password **squiggle**.

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STAGE TWO

1. Twinkling stars

If you summed the number of lit LEDs based on their color, each group could have either 0, 1 or 2 LEDs lit at any given time. Therefore, the total amount of possible states for the LEDs was $3^3 = 27$. Disregarding the state of 000, there were 26 states. Pairing each state up with the alphabet, with A = 001, the LEDs were blinking through the word **electron**.

2. Beware the russian

This was Standard Algebraic Notation, or chess notation. To arrive to the answer you had to follow the instructions and also break some rules, preferably in a chess simulator. If done as well as possible, you could see that the chess pieces spelled out the number **21**.

3. The fingerprint

The intended way to solve this task was to first google for "fingerprint." Then, if you opened both images given in Photoshop and put them in two layers, you could see a QR code if you applied the difference filter on one of the layers. After extracting the QR code, and reading it, you got the word **Okinawa**.

4. Exploded Encryption

The mental path to the solution on this one was rather difficult to follow. First, you had to realize that the numbers given looked like they were random, and that no standard way of treating the numbers gave anything special. Next, when nothing else worked, you had to overlay the numbers with pi (without the decimal point.) Third, you noticed that some digits in the numbers and pi were the same at the same index. *Pi was the key to extract these numbers*, which were ASCII codes for the word GATTACA. Combining this with the last clue, you found the file "gattaca" on DHG's usual EC2 host. This was a Word document, and by changing the font to very small sized monospace, you got the word **uturam**.