# CS50 and Facebook present CS50x Puzzle Day 

## February 12-13, 2016

- This packet contains 12 puzzles, each of which is independent of all the others.
- The answer to each puzzle is a single word, short phrase, or proper name in English.
- One member of your team should input all of your answers at http://cs50.edx.org/puzzles/submit anytime before 23:59 (in your own time zone) on Saturday, February 13, 2016.
- You may use the Internet and any other resources at your disposal.
- You are encouraged (but not required) to work on a team with I, 2, or 3 classmates or friends, either in person or online.
- Have fun and good luck!


## Puzzle \#I: 8000 Words

"It's kind of like trying to sing the words to the Macarena. You can sound out the words but you have no idea what you're singing."


Answer:

## Puzzle \#2: Bento Boxes

"You can't connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future."


| B | P | N |
| :---: | :---: | :---: |
| K | Q | F |
| M | R |  |


| A | L | X |
| :---: | :---: | :---: |
| B |  | G |
| C | E | E |

Answer:

## Puzzle \#3: Fill-Ins

"Five of them, three of us. Hardly seems fair. Maybe we should give them a chance to surrender."

- The Three Musketeers


## COUNT COYOTE DALTREY DIAMONDBACK

HE
HUDDLE
HULU
MONDAY
NETFLIX
SHE
TOWNSHEND
TUESDAY

ROUND ONE
$\qquad$
$\qquad$ -
$\qquad$ , $\qquad$ , $\qquad$
$\qquad$ , $\qquad$ , $\qquad$
$\qquad$ , $\qquad$ , $\qquad$
$\qquad$ , $\qquad$ , $\qquad$
$\qquad$ , $\qquad$ , $\qquad$

ROUND TWO
$\qquad$ , $\qquad$ , $\qquad$
$\qquad$ , $\qquad$ , $\qquad$
$\qquad$ , $\qquad$ ,

Answer: $\qquad$

## Puzzle \#4: Quick Message

"Then again, maybe some of you have come to Hogwarts in possession of abilities so formidable that you feel confident enough to not pay attention."

I was sitting on my computer when a friend rushed by, staring intently at something. He shoved me aside and, still looking at the figure in the distance, hurriedly typed something before running off towards it. When I looked at the screen it read:
ueuag rKJ AGIQ GIAR FEgN

## What important message was my friend trying to tell me?

Answer: $\qquad$

## Puzzle \#5: Not Yours

"Aboard my ship, excellent performance is standard, standard performance is substandard, and substandard performance is not permitted to exist."

- The Caine Mutiny

| OVER <br> I | $\begin{gathered} \text { YOU } \\ \text { I } \end{gathered}$ | $\begin{gathered} \text { VERTICAL } \\ 2 \end{gathered}$ | $\begin{gathered} \text { WITHIN } \\ 2 \end{gathered}$ | $\begin{gathered} \text { EVEN } \\ 2 \end{gathered}$ | UNDER I |
| :---: | :---: | :---: | :---: | :---: | :---: |
| THREE I | $\begin{gathered} \text { TAKE } \\ I \end{gathered}$ | $\begin{gathered} \text { EDGES } \\ 2 \end{gathered}$ | $\begin{gathered} \text { THE } \\ 2 \end{gathered}$ | $\begin{gathered} \text { STRAIGHT } \\ 2 \end{gathered}$ | CENTER $1$ |
| $\begin{gathered} \text { OF } \\ 2 \end{gathered}$ | $\begin{gathered} \mathrm{IN} \\ 3 \end{gathered}$ | $\begin{gathered} \text { AND } \\ 4 \end{gathered}$ | $\begin{gathered} \text { MIX } \\ 3 \end{gathered}$ | $\begin{gathered} \text { AND } \\ 3 \end{gathered}$ | $\begin{gathered} \text { ONCE } \\ 2 \end{gathered}$ |
| $\begin{gathered} \text { THEN } \\ 2 \end{gathered}$ | $\begin{gathered} \hline \text { LETTERS } \\ 3 \end{gathered}$ | FROM <br> 3 | $\begin{gathered} \text { LEFT } \\ \quad . \end{gathered}$ | $\begin{gathered} \text { TO } \\ \text { I } \end{gathered}$ | THE |
| WORDS <br> 2 | $\begin{gathered} \text { FOUR } \\ 4 \end{gathered}$ | $\begin{gathered} \mathrm{BOX} \\ 4 \end{gathered}$ | $\begin{gathered} \text { CONTAINED } \\ 2 \end{gathered}$ | BETWEEN <br> I | $\begin{gathered} \text { RIGHT } \\ I \end{gathered}$ |
| $\begin{gathered} \text { STIR } \\ I \end{gathered}$ | $\begin{gathered} \text { ALL } \\ 2 \end{gathered}$ | $\begin{gathered} \text { CORNERS } \\ 2 \end{gathered}$ | SQUARES <br> I | $\begin{gathered} \text { FINISH } \\ 0 \end{gathered}$ | $\begin{gathered} \text { AND } \\ 0 \end{gathered}$ |

Answer: $\qquad$

## Puzzle \#6: \#strictly

"I got a triple word score with a double letter Q . If that's not a time to bust out the Scrabble dance, what's the point of having one?"
OTROT 1
SO 2
WARE 5
CALSO 6
BALT 6
BA 2
FLA 4
ALT 1
IE 2
AND 3
COG 3
CIKEN 6
BREAK 2

A BC DE F G HI J K L M
NO P QR ST UV W X Y Z

Answer:


Page 6

Puzzle \#7: Pathfinder
"For the path you will take will lead you to certain destruction!"

- Labyrinth


Answer:


Page 7

## Puzzle \#8: Missed Connection

"No good movie is too long, and no bad movie is short enough."

- Roger Ebert

Movie critics Phil Mofile and Mou Vefan don't have much in common. Can you figure out what the only movie they both like is?

Film I
Phil: This movie-what can you say other than "fantastic"? Superb acting with great cinematography. Oscar front-runner!
Mou: I didn't really care for that flick. Apart from the confusing dialogue and poor lighting, the soundtrack was awful. It's absurd to call it a candidate for picture of the week, let alone an Oscar.

## Film 2

Phil: Ugh. The plot was hackneyed, the camera work was not good at all, and the climactic scene was stupid because it was obvious who the winner would be.
Mou: I loved this one from start to finish. Edge of your seat type stuff. Expect this movie to come out a winner come award season.

Film 3
Phil: The book was great, but this movie effort was ruined entirely in the execution. Who directed this? Surely not the esteemed gentleman whose name shows up in the credits.
Mou: I didn't care much for its novel form-despite that, it sure made a phenomenal film. Directed by a maestro, as we all know, and he did a simply wonderful job.

## Film 4

Phil: By its finish, I was applauding out loud. Special effects were amazing, and I need more of these characters. Sequel, please!
Mou: Bored halfway through. The movie finally mercifully ended; by the time the credits rolled, it felt like it had been ten hours.

## Film 5

Phil: Ben Affleck is the only bright spot. Virtuoso performance as the twenty-something struggling with depression-really showcases his range as one of the best alive.
Mou: When you write this script, you need a great actor to pull it off. Affleck falls painfully short. A Philip Seymour Hoffman or a Heath Ledger would have been an infinitely better choice.

## Puzzle \#9: Seasons of Change

"The tree house was supposed to bring us more independence, but what the summer actually brought was independence from each other."

- Now and Then
$\underline{2016}$

| $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{l}$ | $\mathbf{S}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: | $\mathbf{S}$.


| M | T | W | T | F | S | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 |  | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | $\begin{aligned} & 14 \\ & 5^{14} \end{aligned}$ |
| 15 | 16 | 17 | 18 | $3^{19}$ | 20 | 21 |
| 22 | 23 | $5^{24}$ | $7^{25}$ | 26 | $2^{27}$ | 28 |
| 29 | 30 | 31 |  |  |  |  |

Answer:

## Puzzle \#|0: Play to Win

"Now casinos have house rules. They don't like to lose. So you never show that you're counting cards. That is the cardinal sin, Ray."

- Rain Man

The below represents a perfectly interlocking grid of ten words and ten five-card poker hands (diagonals do not count).


Answer: $\qquad$

## Puzzle \#I I: Historical Memes

"Each card has its own name: The Magician, The Empress, The Fool, The Wheel of Fortune, Strength. They represent challenges and tests, twists of fate. No card is all good or all bad."

- My So-Called Life, "Other People's Mothers"

I


5


7


9


14





Answer:

> (just submit this word)

## Puzzle \#| 2: Triple Threat

"Lina. She can't act, she can't sing, she can't dance. A triple threat."

- Singin' in the Rain

A:

|  | 1 | 2 | 3 | 2 | 1 |  |  |  |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

B:

|  | 2 | 2 | 3 |  | I | 3 | 3 2 3 | 4 | 1 |  | 4 <br> 2 <br> 5 | 3 2 4 2 | 3 1 8 | 1 7 2 2 | 3 1 1 1 2 2 | 1 2 2 2 | 5 3 1 2 | $\begin{aligned} & 3 \\ & 1 \\ & 2 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{array}{\|l\|} \hline 3 \\ 1 \\ 1 \\ 1 \\ 2 \\ 2 \\ \hline \end{array}$ | $\begin{array}{\|l} 1 \\ 1 \\ 1 \\ 2 \\ 2 \end{array}$ | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 1 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I 714 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| II, 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| II, 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 111 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 2211 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I 2211 I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I I I I I I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \\| \| \| \| I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I I I I I I I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I, II |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1111 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I I I \\| 2 I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I I I \\| 2 I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11111 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I 3 I I I I I I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| I 1 1 1 \\| \| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Note I: In the left column, commas have been added to rows with "II"s to more clearly distinguish between two " I "s and a single " II ".

Note 2: The " $X$ " in the fourth column is a placeholder for " 17 ".
c:

|  | 4 | 3 | 5 | 5 | 9 | 5 2 1 1 | 4 <br> 3 <br> 1 <br> 1 | 1 <br> 2 <br> 1 <br> 1 <br> 1 <br> 1 | 1 <br> 1 <br> 1 <br> 1 <br> 1 <br> 1 | $\begin{array}{\|l\|} \hline 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ \hline \end{array}$ |  <br> 1 <br> 3 <br> 2 | 3 | 1 | 5 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 62 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 61 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 111 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2222 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 516 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 631 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4211 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 412 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 422 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 215 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Note: The yellow squares will not be filled in when the picture is complete.
$A+B+C=$ Answer:

