GETTING STARTED

1. Getting the output right is important, but clean code is more important. You should **absolutely** read this post on what we look for in your code, and how to get started with the coding challenge.

2. Remember, we expect a command line app. So no web apps will be considered for evaluation.

3. Usage of non-essential 3rd party libraries will affect your evaluation.

4. Add a readme with how to get your code working, and how to test your code.

PROBLEM 1: A GOLDEN CROWN

There is no ruler in the universe of Southeros and pandemonium reigns. Shan, the gorilla king of the Space kingdom wants to rule all Six Kingdoms in the universe of Southeros. He needs the support of 3 more kingdoms to be the ruler.

Each kingdom has an animal emblem and Shan needs to send a message with the animal in the message to win them over.

LAND emblem - Panda, WATER emblem - Octopus, ICE emblem - Mammoth, AIR emblem - Owl, FIRE emblem - Dragon.

Your coding challenge is to have King Shan send secret message to each kingdom and win them over.

Once he wins 3 more kingdoms, he is the ruler! The secret message needs to contain the letters of the animal in their emblem. For example, secret message to the Land kingdom (emblem: Panda) needs to have the letter 'p','n','d' at-least once and 'a' at-least twice. If he sends "**a**1**d**22**n**333**a**4444**p**" to the Land kingdom, he will win them over.

PROBLEM 1- SAMPLE INPUT OUTPUT

Who is the ruler of Southeros?

Ouput: None

Allies of Ruler?

Output: None

Input Messages to kingdoms from King Shan:

Input: Air, "**o**aaa**w**aa**l**a"

Input: Land, "**a**1**d**22**n**333**a**4444**p**"

Input: Ice, "z**m**z**m**z**m**z**a**z**t**z**o**z**h**"

Who is the ruler of Southeros?

Output: King Shan

Allies of Ruler?

Output: Air, Land, Ice

Who is the ruler of Southeros?

Output: None

Allies of King Shan?

Output: None

Input Messages to kingdoms from King Shan:

Input: Air, "**L**et's s**w**ing the sw**o**rd together"

Input: Land, "**D**ie or **p**l**a**y the t**a**me of thro**n**es"

Input: Ice, "**Ah**oy! Figh**t** for **m**e with **m**en and **mo**ney"

Input: Water, "Summer is coming"

Input: Fire, "**Drag on** Martin!"

Who is the ruler of Southeros?

Output: King Shan

Allies of King Shan?

Output: Air, Land, Ice, Fire

PROBLEM 2: BREAKER OF CHAINS

The other kingdoms in the Universe also yearn to be the ruler of Southeros and war is imminent! The High Priest of Southeros intervenes and is trying hard to avoid a war and he suggests a ballot system to decide the ruler.

Your coding challenge is to help the High Priest choose the ruler of Southeros through the ballot system.

Rules of the Ballot system

1. Any kingdom can compete to be the ruler.

2. They should send a message to all other kingdoms asking for allegiance.

3. This message will be put in a ballot from which the High Priest will pick 6 random messages.

4. The High Priest then hands over the 6 messages to the respective receiving kingdoms.

5. The kingdom that receives the highest number of allegiance is the ruler.

Rules to decide allegiance by a kingdom

1. The receiving kingdom has to give allegiance to the sending kingdom if the message contains the letters of the animal in their emblem (same as problem 1).
2. If the receiving kingdom is competing to be the ruler, they will not give their allegiance even if the message they received is correct.
3. A kingdom cannot give their allegiance twice. If they have given their allegiance once, they will not give their allegiance again even if they get a second message and the message is correct.

In case there is a tie

1. If there is a tie, the whole ballot process is repeated but only with the tied kingdoms till there is a winner.

Sending messages

The format of the message dropped in the ballot should contain :

- The Sender kingdom
- The Receiver kingdom
- The Message (should be selected randomly from the messages provided in the table below)

TABLE WITH MESSAGES

Summer is coming
a1d22n333a4444p
oaaawaala
zmzmzmzaztzozh
Go risk it all
Let's swing the sword together
Die or play the tame of thrones
Ahoy! Fight for me with men and money
Drag on Martin!
When you play the tame of thrones you win or you die.
What could we say to the Lord of Death? Game on?
Turn us away and we will burn you first
Death is so terribly final while life is full of possibilities.
You Win or You Die
His watch is Ended
Sphinx of black quartz judge my dozen vows
Fear cuts deeper than swords My Lord.
Different roads sometimes lead to the same castle.
A DRAGON IS NOT A SLAVE.
Do not waste paper
Go ring all the bells
Crazy Fredrick bought many very exquisite pearl emerald and diamond jewels.
The quick brown fox jumps over a lazy dog multiple times.
We promptly judged antique ivory buckles for the next prize.
Walar Morghulis: All men must die.

The message list can also be found in
https://gist.github.com/dhanush/8374c96fd6be4af08cde4852572ee396

PROBLEM 2- SAMPLE INPUT OUTPUT

Who is the ruler of Southeros?

Output: None

Allies of Ruler?

Output: None

Enter the kingdoms competing to be the ruler:

Input: Ice Space Air

(the messages should now be randomly picked from the given table for each).

Results after round one ballot count

Output: Allies for Ice : 2

Output: Allies for Space: 1

Output: Allies for Air: 0

Who is the ruler of Southeros?

Output: Ice

Allies of Ruler?

Output: Land Fire

Who is the ruler of Southeros?

Output: None

Allies of Ruler?

Output: None

Enter the kingdoms competing to be the ruler:

Input: Land Air

Results after round one ballot count

Output: Allies for Land : 1

Output: Allies for Air: 1

Results after round two ballot count

Output: Allies for Land : 1

Output: Allies for Air: 2

Who is the ruler of Southeros?

Output: Air

Allies of Ruler?

Output: Fire Space

Who is the ruler of Southeros?

Output: None

Allies of Ruler?

Output: None

Enter the kingdoms competing to be the ruler:

Input: Fire Space

Results after round one ballot count

Output: Allies for Fire : 0

Output: Allies for Space: 0

Results after round two ballot count

Output: Allies for Fire : 1

Output: Allies for Space: 2

Who is the ruler of Southeros?

Output: Space

Allies of Ruler?

Output: Land Ice

CHECK LIST - SUBMITTING CODE

1. Please compress the file before upload. We accept .zip, .rar, .gz and .gzip

2. Name of the file should be the problem number you are solving. For e.g. if you have solved problem 1&2, please name your file ‘Set5problem12.zip’.

3. We advise not to put your personal details in your solution as we maintain your anonymity with a company until there is genuine interest from them.

4. Please upload only source files and do not include any libraries or executables or node_modules folder.

5. You can expect your evaluation in 3-5 working days.

6. Yes, you can resubmit code based on our feedback. We accept 3 submissions in total. So do implement all feedback and make your submissions count!