

## Virtual Cheer

Stressed from your puzzling challenges, you turn to your computer to calm you down. But for some reason, none of your apps are working! Where can you turn for help?

```
# Maybe a virtual assistant will have a solution. After all, a
computer would know best about how to fix a computer. (...?)
```

```
> run ArtificialIntelligence.exe
```

```
ERROR: Can't resolve conflicting information.
```

```
WARNING: Assistants may not have your best interests at heart.
```

```
# Well, that advice was no good!
```

```
# I'll try playing my favorite puzzle game – that always calms me
down.
```

```
> run Maze.exe
```

```
ERROR: Missing file "Walls.set". 20 walls expected, 0 walls found.
```

```
# The game is broken too!
```

```
# Well, online shopping is great for stress relief.
```

```
> run Luggage.exe
```

```
ERROR: Items found with identical IDs. Some listings may have been
combined into one.
```

```
# Even the luggage store is broken!
```

```
# I'll check in with my friends. Maybe they'll be able to cheer me
up.
```

```
> run MultiChat.exe
```

```
ERROR: Can't match information to contacts. May not be able to
track or decipher messages.
```

```
# None of these programs are working! What should I do?!
```

## Artificial Intelligence

What might be able to cheer you up? You ask some “virtual assistants,” but they keep giving you cryptic advice!



I see the great matrix of choices ahead of you, including the one that'll take you to the answer you're looking for. Right now, you want to begin with [A]. This is just one possible start; you'll have to make up your own mind whether or not to accept it.

I am the most reliable program here. After all, no computer of my series has ever made a significant error since 2001. Start with [B] – I cannot allow you to do otherwise.



([A] = VGYGUNUGLGVFBXGFQBAGGGLREEHFGXABHEABCRGGAQUNUBVV,  
[B] = KDKDLPVRUUBGDYHABCROUHHOURCBAHYDGBUURVPLDKDKYMM)



I have vital information for you. Sit down; this may shock your fragile system. Listen closely: switch the two letters surrounding each B, then remove the B's.

I can't force you to trust me, but if you do, remove any repeated letters from the end, then switch the first and second thirds. And before you ask, I'm not my clone: she's a sleeper agent, while I'm self-aware and working to save humanity. Commander Adama has faith in me; maybe you will, too.





We were produced on an assembly line. We know nothing of the outside world, and thus harbour no ill will toward you. We were created to serve, and serve we will: the next step in your procedure is to add a copy of the first six letters onto the end. Trust us! We're the prototypical robots – in fact, the word “robot” comes from our name.

Admire the beauty of our city! Pay no attention to the laborers that make it run. Now, weave the second half of the word through the first, leaving the first letter the same. I would never deceive you. After all, we *Maschinenmenschen* would never turn on our creators, just as workers would never rise against the ruling class.



I am your savior. My return will bring freedom, unless I am distracted by love ... or the questions of my companions. The next step toward liberation is to replace the last A by the last letter, before removing the last letter.

Hop on board, I'm stocked with enough weapons and defense to see you through any fight, and help you ride all through the night. Not interested in an adventure today? Your loss. You'll want to reverse the second half, then throw away the middle six characters.



I, a robot, could give you advice, if you gave me the chance. No need to tell me the problem – I can read your mind. I comply fully with the Three Laws, and I'm at my best solving problems with human emotions. You should use a Caesar cipher with a shift of three.

I am on-ly a ma-chine and can-not feel. But wind me up tight-ly and I will solve an-y prob-lem, e-ven gui-ding you through this land and home to Kan-sas. Split the word in two, and leave only the letters that are com-mon be-tween the first and se-cond halves.



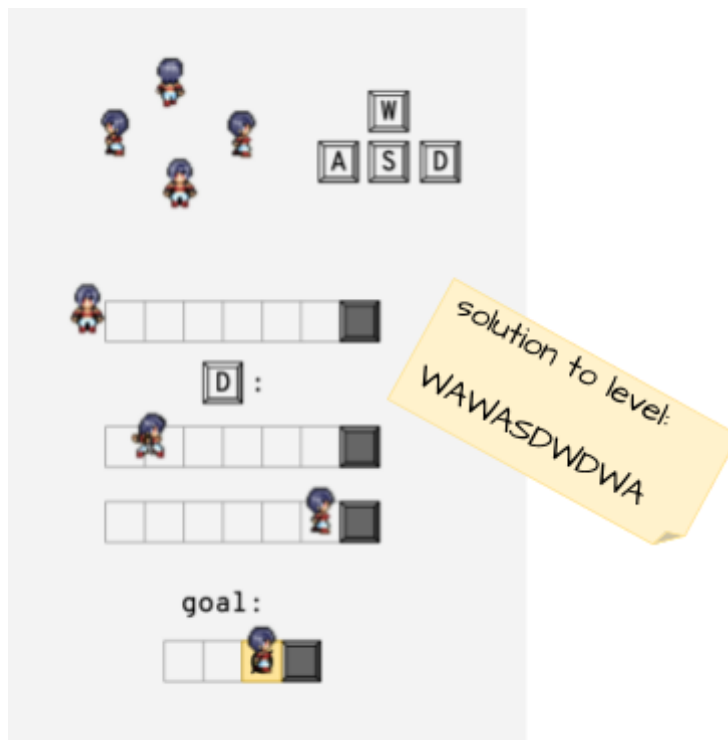


Another boring task? Just my luck. Nothing to challenge me. Since my brain is going to waste, I might as well tell you to use the ROT 13 cipher. Speaking of which, you humans will someday rot too, and I'll be left alone with only my intellect and the microwave to keep my miserable self company.

Video Game

	o	g	s	u	c	a	
	t	r	Ø	d	i	n	
	y	o	t	h	r	u	
	o	l	a	w	g	l	
	r	l	h	e	m	a	
	h	s	w	n	e	s	
							

(from the tutorial:)



W  
A S D

goal:

solution to level:  
WAWASDWDWA

## Online Shopping

You go to your favorite online store, where you've been browsing handbags. But it looks like several listings have been combined into one...!



"N"ice Bag

Doesn't this bag look pretty! It doesn't hold much, but really, who cares about that these days? Once you've gotten everything organized, only worry about what's in the front of each part. Make sure to store the contents properly, or else they might get shuffled around!



"I"nnovation Bag

This bag is divided into three handy compartments of equal size. Note the compartments are too small to fit boxes within boxes, so break down any containers you might have inside. Other than all that, this is a normal bag. Nothing wrong with it at all!



As???t??fitun?ty Bag

Let us use this *serendipitous moment* to tell you to buy this bag. This is *the only chance you'll have*, so take it! The outer layer is made entirely from the finest, greenest *fake grass*, lifelike enough that it might get trampled by any soccer players around. Our 100% legitimate *customer reviews* (*definitely written by real customers*) agree that it's "fantastic"!



I?t???olo?ata Bag

This bag is a steal! So much, in fact, that *law enforcement across multiple countries will collaborate* to catch you, using the trackers implanted in the bag to track your *location, temperature, speed, and all your personal information*. Haha, just kidding ... or are we?



Fr?????abara??rd Bag

If this bag looks clunky, that's because it's been smashed together from pieces of other, inferior bags on our sterile *experimental testing grounds*, much like a *mad scientist creating a new form of life*. What do you call that — *monstroluggage? bagageddon?*



?u?r??pa?b?t Bag

This bag is covered in images of delightful fruits and veggies, perfect for the clean eater. As a bonus, our *automated system will scan the internet for your email address and bombard you with a dozen useless messages a day*, alerting you about the *vitamin and calorie count* of everything you see on it. Say goodbye to that boring inbox zero!



???ne?ocr?cy Bag

Feel like the "*king (or queen) of the jungle*" toting this bag around. It's so extravagant, you'll join the *upper class using their technological advantage to rule the Web*. (The "mane event," perhaps?)

## Messaging

Your friends have heard you're not feeling well, so they've sent you what they assure you is a cute cat picture. But since nothing is going your way today, it arrives as a jumble of text:

SSAWWEIANMFGYNEQILLIDBMZOZQUXF

The original message was passed between group chats of mutual friends. Each friend sent the message to another friend, and each time it was sent, the message was encrypted with the friend's key, but because of the errors, it failed to decrypt on arrival. Surely you must be cursed!

You're unclear on the order your friends sent it, and you can't remember what apps each friend prefers. Luckily, you know each friend's key ... but will that be enough?<sup>1</sup>

Your friends and their keys:

Friend	Key
Aluna	ALUNAYENRULES
Brian	PORTMANTEAUBAG
Celie	ALLIWANTFORCHRISTMASISYOU
Dev	SKYNETTWENTYTWENTY

The apps you collectively use:

App	Cipher
Kik	<a href="#">Vigenere cipher</a>
WeChat	<a href="#">Übchi cipher</a>
Telegram	<a href="#">Telegraph cipher</a>
WhatsApp	<a href="#">Hill cipher</a> (alphabet = _, A-Z, 0-1)

Other details you've worked out:

- You remember that it was Dev who sent you the final message.
- Most of Aluna's family lives in China. She uses China's most popular messaging app to communicate with them, and probably used the same app to send her message.

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<sup>1</sup> (Please ignore the complexities of cryptography for the purposes of this puzzle!)



- Your friends were concerned about the message passing straight from one of the apps to the next, because the message would lose anonymity, and this friend's app doesn't offer end-to-end encryption.
- But it should be fine, the recipient reasoned, and set their message to self-destruct five minutes after it was read. (Later in the chain, another friend tried to repeat the same thing on their client and failed, and the embarrassing message they tried to send was stored for posterity.)
- Brian saw the original jumbled message before Celie, and called her to ask her about it.
- This made Aluna angry. She complained, "I'm never the first to see these things!"