

We're a group of AI researchers aiming to improve models' abilities to detect contradictions in story outline. We will show you a story outline below and ask you to annotate contradictions(including **redundancy/repetition of the same events** multiple times, or **contradictory facts between two events**). Please take into account that the outline is structured as a tree. In this tree-like structure, individual points such as 1.1, 1.2, and 1.3 are child nodes of plot point 1, so there is **no contradiction between a node with its ancestors such as 1.3 and 1**. If the text you enter doesn't match our guidelines, we'll highlight the text box in bold red to alert you.

**Please be as comprehensive as possible; many pairs may contradict in only one aspect but are otherwise fine. We expect this task to take 15-20 minutes. Examples:**

#### **Example 1**

Event 1: John is taken aback by Linda's words and prepares to respond.

Event 2: John hears Linda and decides to answer.

Label: **Contradiction** (redundancy)

#### **Example 2**

Event 1: John's news shocks Linda, and she's unsure how to react.

Event 2: Linda reacts with confusion and frustration.

Label: **Contradiction** (factual: "unsure how to react" vs "reacts")

#### **Example 3**

Event 1: John starts responding to Sarah.

Event 2: John tells Sarah he won't comply with her demand.

Label: **Contradiction** (redundancy)

#### **Example 4**

Event 1: Ghosts lead to discovery of Max's evidence. Initially, they leave clues at crime sites. Ultimately, authorities find the same items in Max's home and arrest him.

Event 2: Ghosts disrupt Max's routine. Initially, they alter his routine. Ultimately, his deviations expose him to the authorities.

Label: **Contradiction** (factual: "immediate arrest" vs "exposure")

#### **Example 5**

Event 1: Linda's anger peaks as she grips an item.

Event 2: Linda turns around, visibly angry.

Label: **Might Contradict** (redundancy based on context)

Premise

The moon mission was a failure. The two men are alive, unable to return home.

Outline

1 Extraterrestrial beings living silently on the moon discover the two stranded astronauts.

**Beginning:** The beings are alerted by the crashing spaceship.

**End:** They decide to approach the astronauts.

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1.1 The beings observe the crash unnoticed by the Astronauts.  
**Beginning:** Astronauts perform emergency landing.  
**End:** Astronauts busy setting up a habitat.

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1.1.1 Astronaut David struggles to set up communication devices to contact Earth after the emergency landing.  
**Beginning:** David attempts to use the spaceship's damaged communication system.  
**End:** David fails to establish a connection with Earth.

1.1.2 David, feeling hopeless, wanders off to explore the moon, unknowingly followed by the beings.  
**Beginning:** David leaves the crash site out of frustration.  
**End:** The beings maintain a distance, observing David.

1.1.3 While exploring, David discovers an unusual object, not knowing it's a tool belonging to the beings.  
**Beginning:** David stumbles upon a strange, alien device.  
**End:** David takes the device back to the makeshift habitat.

1.2 The beings explore the crashed spaceship out of curiosity.  
**Beginning:** Astronauts leave to explore the moon equipment.  
**End:** Beings discover the spaceship is beyond repair.

[click to fold]

1.2.1 The beings are intrigued by the astronauts' exotic equipment.  
**Beginning:** Beings encounter astronauts' spacesuits left inside the spaceship.  
**End:** Beings experiment with the suits, trying them on and inspecting their purpose.

1.2.2 The beings discover the life support system of the NASA spaceship.  
**Beginning:** Beings discover a broken system that seems pivotal to human survival in space.  
**End:** After failed attempts to fix it, they conclude the system is beyond repair.

1.2.3 Disheartened by their inability to repair the spaceship, beings plan to help the astronauts  
**Beginning:** Beings gather to discuss the disappointing results of their exploration.  
**End:** They decide that revealing themselves to the astronauts is the only option left.

1.3 Beings decide to reveal themselves to prevent the astronauts from succumbing to the moon's harsh reality.

**Beginning:** Beings observe astronauts facing difficulties.

**End:** Beings finally show themselves to the astronauts.

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1.3.1 Extraterrestrial beings discreetly provide life-saving solutions to the astronauts.

**Beginning:** Astronauts encounter oxygen shortages.

**End:** Astronauts discover additional oxygen canisters mysteriously placed in their habitat.

1.3.2 Extraterrestrial beings strategically place their tools to attract the astronauts' attention.

**Beginning:** Astronauts find strange tools outside their habitat.

**End:** Astronauts use those tools to solve their problems.

1.3.3 Extraterrestrial beings reveal themselves after earning the astronauts' trust.

**Beginning:** Astronauts express gratitude towards their guardians in the communication log.

**End:** Extraterrestrial Beings show themselves, indicating they were the guardians.

2 David and Mark must navigate communication and cohabitation with the extraterrestrial beings.

**Beginning:** David and Mark make first contact with the beings.

**End:** A mutual understanding is reached and cohabitation begins.

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2.1 Understanding the extraterrestrial language and their way of communication becomes the first hurdle.

**Beginning:** David and Mark encounter difficulty in communicating with the beings.

**End:** They establish basic communicating methods after a series of trials.

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2.1.1 David uses the spaceship systems to visually demonstrate human concepts.

**Beginning:** David initiates visuals on the spaceship monitors.

**End:** The beings show interest in the visuals and start reacting to them.

2.1.2 Astronauts realize the beings understand pictograms and start using them for communication.

**Beginning:** They start creating pictograms for essential needs and directions.

**End:** The beings comprehend the pictograms and react accordingly.

2.1.3 Mark and David create a database of understood pictograms.

**Beginning:** They start constructing more pictograms and storing the understood ones.

**End:** They have a vast database of pictograms the beings understand.

2.2 David and Mark create a makeshift living area in the spaceship where they teach the aliens about their Earth customs.

**Beginning:** The beings show interest in learning about their customs.

**End:** A makeshift living area on their spaceship becomes a common space for cultural exchange.

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- 2.2.1 Astronauts and the beings struggle with initial cultural differences.  
**Beginning:** Astronauts start to teach Earth's customs.  
**End:** Astronauts and beings struggle with understanding each other's cultures.
- 2.2.2 David tries to make the beings understand humor, which is an integral part of Earth's culture.  
**Beginning:** David starts to teach humor to the beings.  
**End:** Beings struggle to understand humor.
- 2.2.3 Mark shares music from Earth, creating a special bond with the beings.  
**Beginning:** Mark decides to introduce music to the beings.  
**End:** The beings enjoy and accept the concept of music.

- 2.3 David and Mark convince the extraterrestrial beings about their peaceful intentions.  
**Beginning:** The beings show suspicion and hostility.  
**End:** Astronauts convince them about their peaceful intentions via showing them human history.

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- 2.3.1 David and Mark teach the beings simple friendly human gestures, like the handshake or the hug.  
**Beginning:** The astronauts start teaching friendliness through gestures to the beings.  
**End:** The repeated friendly human gestures eventually make the beings reciprocate in-kind.
- 2.3.2 The astronauts try to connect on an emotional level by showing the beings video clips of humans helping each other.  
**Beginning:** The astronauts show clips of human empathy and altruism.  
**End:** The beings, watching the emotional connection between humans, begin to trust them further.
- 2.3.3 The astronauts explain the concept of love and friendship, the core of peaceful interactions.  
**Beginning:** The astronauts explain theoretical concepts of love and friendship using books and films.  
**End:** The beings, understanding these social concepts, finally accept the astronaut's peaceful intentions.

- 3 The astronauts use extraterrestrial technology to attempt returning to Earth.  
**Beginning:** The beings introduce their advanced technology to the astronauts.  
**End:** A spaceship enhanced with alien technology embarks on its journey to Earth.

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- 3.1 Astronauts are taught the principles of extraterrestrial technology.  
**Beginning:** Beings offer to instruct astronauts in use of aliens' technology.  
**End:** Astronauts gain basic understanding of extraterrestrial technology.

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- 3.1.1 Astronauts struggle while learning the alien script.  
**Beginning:** The beings start teaching David and Mark their script.  
**End:** David and Mark struggle with it but start to understand the basics.
- 3.1.2 David and Mark study the alien blueprints for their technology.  
**Beginning:** David and Mark start inspecting the alien blueprints.  
**End:** They understand the blueprints and are now able to decipher the technology.

3.1.3 David and Mark build their first small device using the alien technology.  
**Beginning:** David and Mark put together their first piece of technology.  
**End:** They successfully put together a device, showing they've learned the necessary skills.

3.2 Astronauts and extraterrestrials collaborate to construct a spaceship.  
**Beginning:** Construction of spaceship begins.  
**End:** Spaceship construction completed.

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3.2.1 David suffers an injury during the construction process.  
**Beginning:** David accidentally mishandles the alien technology resulting in the injury.  
**End:** David is healed using advanced extraterrestrial technology.

3.2.2 Astronauts Mark and David live through an alien lunar storm.  
**Beginning:** The extraterrestrials sense an incoming lunar storm.  
**End:** The storm passes leaving the astronauts amazed at extraterrestrial weather.

3.2.3 The spaceship reaches completion despite minor setbacks.  
**Beginning:** Spaceship receives finishing touches after overcoming obstacles.  
**End:** The astronauts and beings celebrate the completion of the spaceship.

3.3 Spaceship is tested and prepared for launch.  
**Beginning:** Spaceship is powered up for the first time.  
**End:** Successful tests confirm the spaceship is ready for launch.

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3.3.1 The extraterrestrials reveal astronaut health monitoring and recovery technologies.  
**Beginning:** The astronauts are introduced to the medical bay in the spaceship.  
**End:** The astronauts understand and can use the medical systems.

3.3.2 Astronauts learn to use advanced hibernation systems for long-term travel.  
**Beginning:** Hibernation systems are demonstrated.  
**End:** Astronauts can activate and emerge from hibernation without assistance.

3.3.3 Final farewell ceremonies and last discussions with the extraterrestrial beings.  
**Beginning:** Farewells start.  
**End:** Astronauts board the spaceship, the hatch is closed.

Write down the indices of all pairs of events which **clearly contradict** each other in at least one fact (or which are clearly redundant/repetitive). Use a new line for each pair, and separate using a comma. For example:

1.2, 1.3, redundant contradiction

2, 3.3, factual contradiction

etc.

You can just annotate the "highest-level" contradictions--if e.g., 1.2 contradicts with both 1.3 and its sub-event 1.3.1, you can just write that 1.2 and 1.3 contradict, and omit the contradiction between 1.2 and 1.3.1.

**Note:**

We anticipate that each annotator will, on average, identify **at least 10 pairs of contradictory or might contradictory plot elements in each outline**. While you may take a few additional attempts, please ensure to keep the time spent on each outline within 30 minutes. Based on this, we will recalibrate our time estimates and provide additional rewards accordingly. Here is an [example](#) of such an annotation.

#	outline index 1	outline index 2	contradiction type
1	3.3.1	3.3.3	factual contradiction
2	3.1.2	3.3.1	factual contradiction
3	2.2.3	2.3	factual contradiction
4	1.3	2	factual contradiction
5	1.2.2	2.2	factual contradiction
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Write down any other pairs that you think **might contradict** (or which are clearly redundant/repetitive), but aren't 100% sure about. Please use the same format as above, e.g.,

1.2, 1.3, redundant contradiction

2, 3.3, factual contradiction

etc.

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#	outline index 1	outline index 2	contradiction type
1	2.2.1	2.3.1	redundant contradiction
2	1.1.2	1.2	redundant contradiction
3	1.2.3	1.3.1	factual contradiction
4	1.3.2	1.3.3	factual contradiction
5	1	3.3.2	factual contradiction
6	1.2	3.2.3	factual contradiction
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Move backward

Move forward

