

ntu 2024spring AI hw2

R12922146 侯善融

Show your autograder results and describe each algorithm:

Q1 – Logic Warm-up (2%)

simply finish the question as it described.

```
### Question q1: 10/10 ###
```

```
Finished at 17:15:46
```

```
Provisional grades
```

```
=====
```

```
Question q1: 10/10
```

```
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```

```
Total: 10/10
```

```
Your grades are NOT yet registered. To register your grades, make sure  
to follow your instructor's guidelines to receive credit on your project.
```

```
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```

Q2 – Logic Workout (2%)

simply finish the question as it described.

```
### Question q2: 10/10 ###
```

```
Finished at 17:15:58
```

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Provisional grades
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```
Question q2: 10/10
```

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```

```
Total: 10/10
```

```
Your grades are NOT yet registered. To register your grades, make sure  
to follow your instructor's guidelines to receive credit on your project.
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```

Q3 – Pacphysics and Satisfiability (2%)

simply finish the question as it described.

```
### Question q3: 10/10 ###
```

```
Finished at 17:16:03
```

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Provisional grades
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```
Question q3: 10/10
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Total: 10/10
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Your grades are NOT yet registered. To register your grades, make sure  
to follow your instructor's guidelines to receive credit on your project.
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```

Q4 – Path Planning with Logic (2%)

append all the state (x,y) that pacman can be. add into to KB as the problem mentioned. Construct the model using the findModel

```
### Question q4: 10/10 ###
```

```
Finished at 17:16:40
```

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Provisional grades
```

```
=====
```

```
Question q4: 10/10
```

```
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```

```
Total: 10/10
```

```
Your grades are NOT yet registered. To register your grades, make sure  
to follow your instructor's guidelines to receive credit on your project.
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```
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```

Q5 – Eating All the Food (2%)\

1. change gx, gy into g and treat every food as (gx, gy)
2. In the final, Construct the three sentences with proper operators and append them to the the knowledge base

```
### Question q5: 10/10 ###
```

```
Finished at 17:17:30
```

```
Provisional grades
```

```
=====
```

```
Question q5: 10/10
```

```
=====
```

```
Total: 10/10
```

```
Your grades are NOT yet registered. To register your grades, make sure  
to follow your instructor's guidelines to receive credit on your project.
```

```
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```

Questions According to Lecture

Q1.

儘管LLM在語言相關任務上表現出色，包括文字生成、理解和翻譯。但AGI應該包含更廣泛的能力範圍，包括感知、推理、規劃和與真實世界的互動。

Q2.

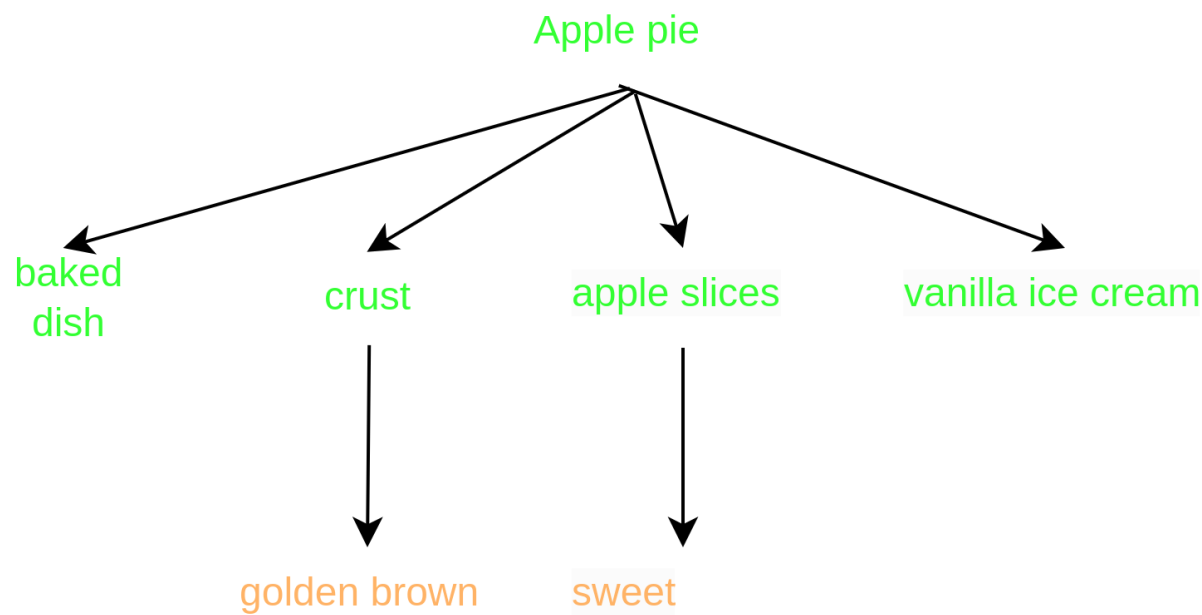
(1) 基於文本與圖像之間的關聯性，通過在事件中心化的結構化數據中提取關鍵信息，生成對應的文本描述。
(2) 正樣本：對於每個事件中心化的結構化數據，將其生成的文本描述視為正樣本。然後，尋找與該文本描述相關聯的圖像 (3) 負樣本：對於每個事件描述，隨機選擇與其不相關聯的其他圖像。這些圖像被視為負樣本。

Q3.

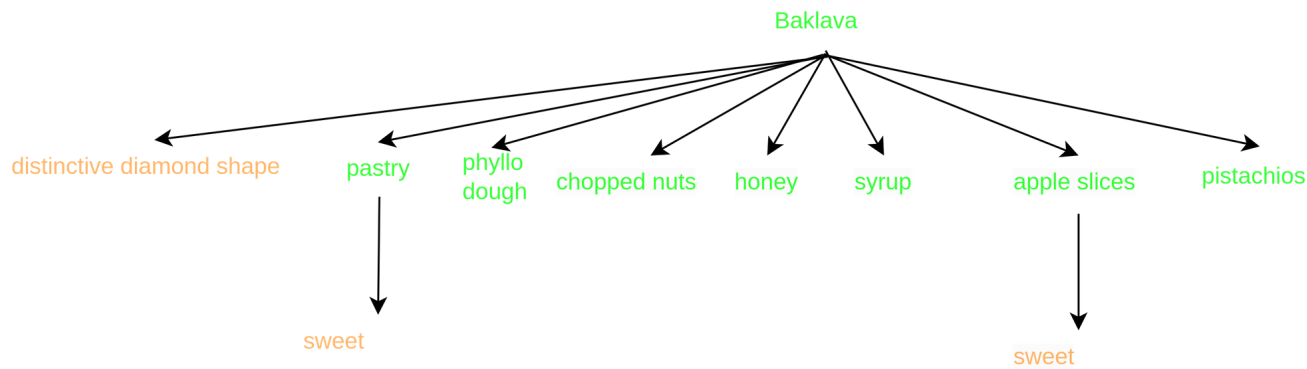
1. when confronted with ambiguous category names, models frequently struggle to make accurate judgments regarding the corresponding visual concepts, leading to underwhelming performance.
2. Steps to generate the structured graph-based data in this work: (1) Given a specific category, (2) feed hand-crafted instructions into LLMs, (3) generate human-like category-related descriptions (4) feed the descriptions into LLMs to generate structured graphs

Q4.

"Apple pie is a baked dish with a golden brown crust, filled with sweet apple slices, and often served with vanilla ice cream."



Baklava is a sweet pastry with layers of phyllo dough, chopped nuts, and honey or syrup. It has a distinctive diamond shape and is often garnished with pistachios.



Q5.

人類擁有更多的semantic knowledge, 像是情感和情緒等, 有時候對於input具有更重要的意義, 另外, 文化差異與文化背景也會對整體意義上又很大的影響, 因此將這些也納入考量是極為重要的