

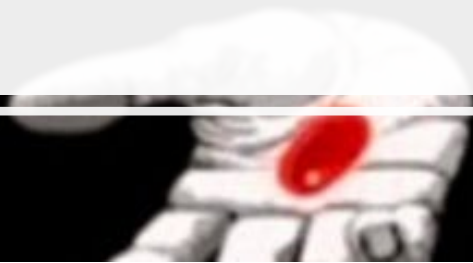
Artificial Intelligence and what it means for Government

DIR Technology Forum
Oct 3rd, 2019

Presented By: Noopur Gupta



Blue Pill or Red Pill ?





Noopur Gupta

I am currently:

- Sr. Systems Engineer at Travis County.

My current AI interests are:

- Pursuing Masters in Computer Science

Connect with me:

- Instagram : @noopurgupta01
- LinkedIn : <https://www.linkedin.com/in/noopurg/>



What is
Artificial
Intelligence ?

Computers acting in a
way that seem
intelligent

Google Duplex: A.I. Assistant Calls Local Businesses To Make Appointments





Will Artificial
Intelligence
replace humans ?



We're
developing
human-
computer
systems.

Google Search
Engine

Wikipedia Bots

Which of
these are AI
problems ?

Answering	Answering questions on jeopardy
Configuring	Configuring the dimensions for the basement of a new house
Tying	Tying Shoelaces
Deciding	Deciding on a route to a new destination
Making	Making sense of a news broadcast
Designing	Designing a robot that walks on water
Establishing	Establishing whether a flower pot can be used as a drinking cup.
Deciding	Deciding whether or not a new animal is a bird

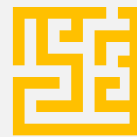
Fundamental Conundrums of AI



Machines or AI Agents have limited resources.



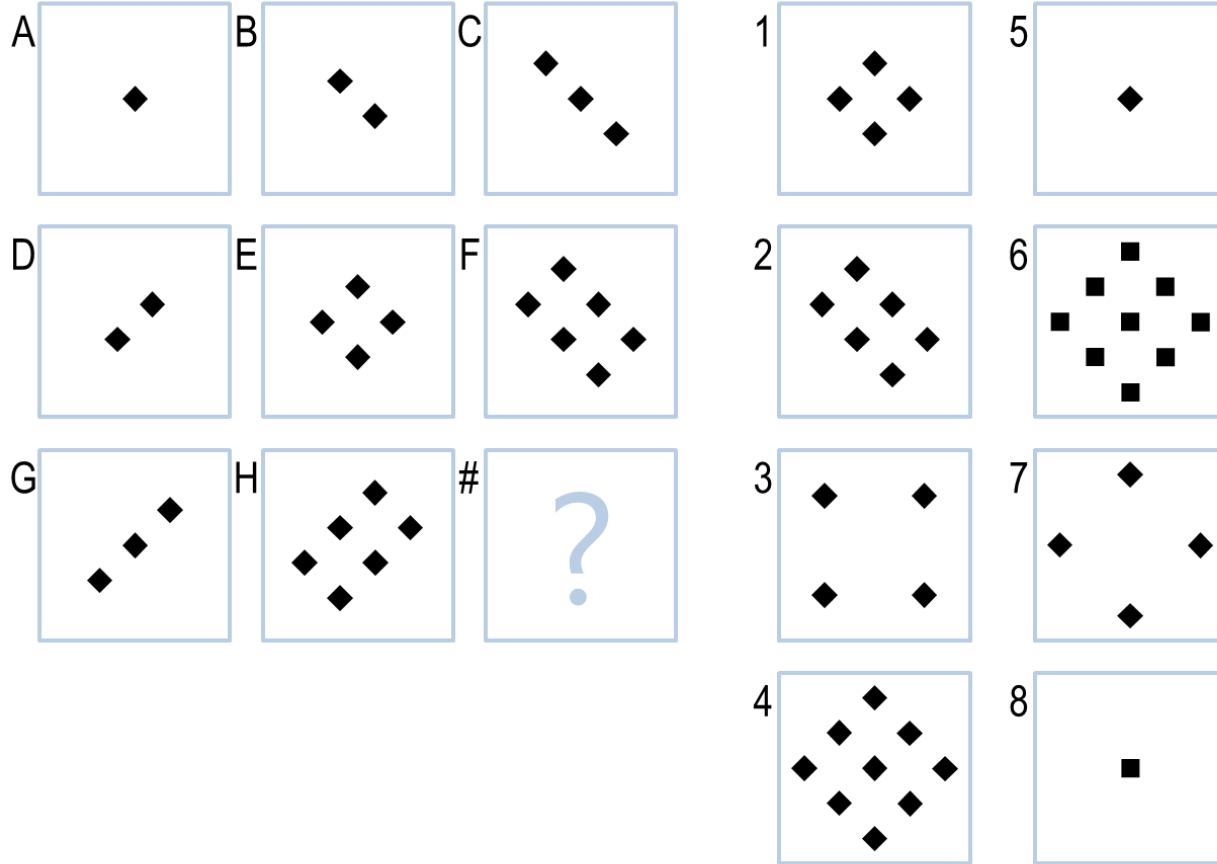
The world is dynamic but knowledge is limited.



Problem solving, reasoning and learning are complex but justification, explanation are even more complex.

Raven's Progressive Matrices Test

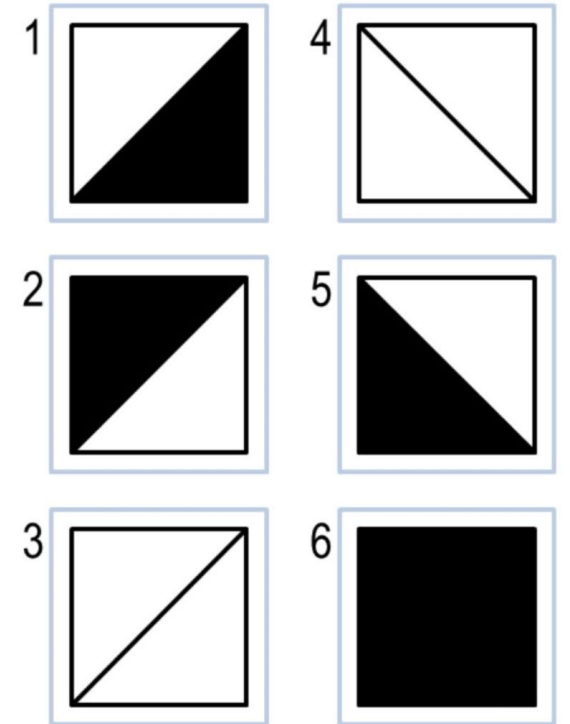
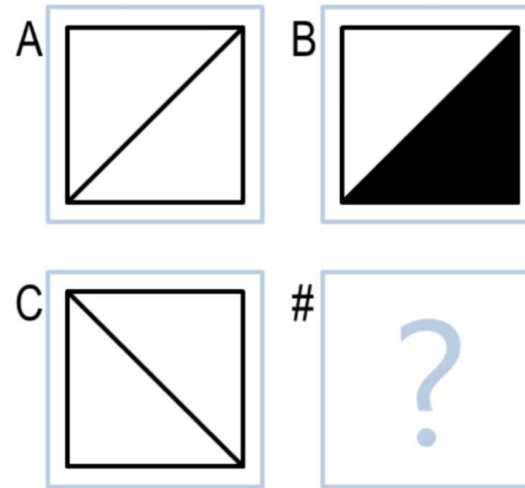
Basic Problem C-03



```
[ $ python RavensProject.py
Basic Problem C-03: Agent's Answer=6 Actual Answer=4
```

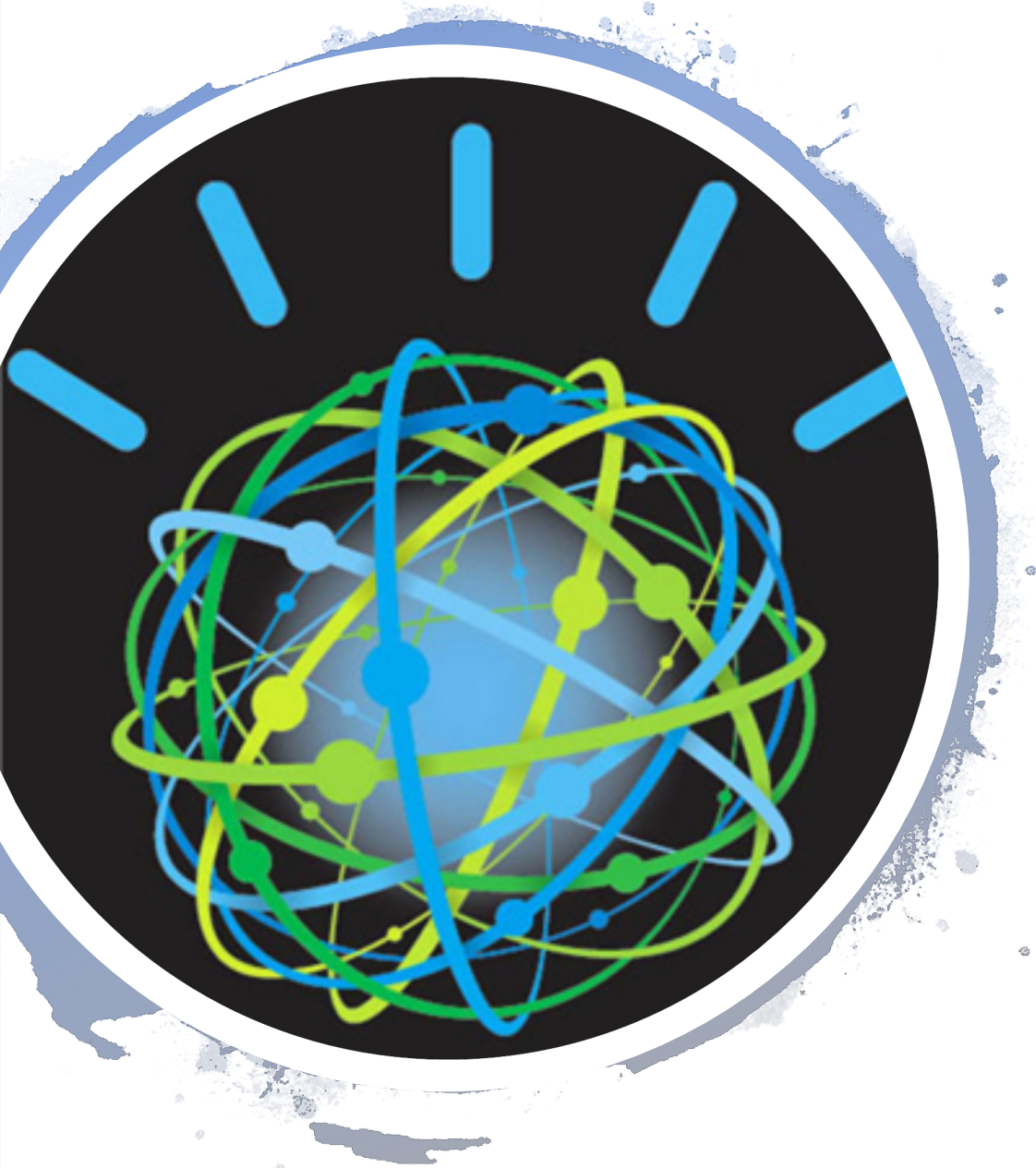
Raven's Progressive Matrices Test 2

Basic Problem B-06



```
$ python RavensProject.py
```

```
Basic Problem B-06: Agent's Answer=5 Actual Answer=5
```



Jeopardy and Watson Challenge





Building AI powered organizations

From siloed work to interdisciplinary collaboration.

From experience-based, leader-driven decision making to data-driven decision making at the front line.

From rigid and risk-averse to agile, experimental, and adaptable

What is Chatbot ?



Chatbot is software that can have conversations with humans and live online on chat platform.

Why do we need chatbots ?

- Scale up operations
- Handle lot of queries
- For range of Identical products and queries
- Reduce mundane tasks

Let's make QnA Chatbot



Login to Azure Portal <http://portal.azure.com> and <http://qnamaker.ai/>



QnAmaker.ai > Create a Knowledge Base> Create a QnA Service(Azure)> Refresh QnAmaker.ai > Create KB>Add QnA pair ->Save and Train>Publish > Save the Published Info



Azure Portal>Create a Resource → (AI+ Machine Learning)>WebApp Bot>All resources > Click on chatbot> Test in webchat



Example : <http://noopurgupta.com>

Resources

[HTTPS://AISCHOOL.MICROSOFT.COM/EN-US/HOME](https://aischool.microsoft.com/en-us/home)



[HTTP://NOOPURGUPTA.COM](http://noopurgupta.com)



[HTTPS://COURSEERA.COM](https://coursera.com)



[HTTPS://UDEMY.COM](https://udemy.com)



Any Questions ?



Thank you