



How to Use Generative AI in School (and still learn stuff)

AI in Action
September 18, 2024

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What's Our Starting Point

Is it ok to...

 yes, definitely!

 eh, maybe

 nah

Is it ok to... Have Halloween Decorations Up Already?

 yes, definitely!

 eh, maybe

 nah

Is it ok to... Have Halloween Decorations Up Already?



yes, definitely!



eh, maybe



nah

Is it ok to... Have Halloween Decorations Up Already?



Is it ok to...

 yes, definitely!

 eh, maybe

 nah

**Is it ok to... Use Generative AI for
entertainment, like playing a game?**

 yes, definitely!

 eh, maybe

 nah

Is it ok to...

 yes, definitely!

 eh, maybe

 nah

Is it ok to... ask for advice from Generative AI, like how to apologize to a friend?

 yes, definitely!

 eh, maybe

 nah

Is it ok to...

 yes, definitely!

 eh, maybe

 nah

Is it ok to... ask for advice from Generative AI, like about a mental health issue?

 yes, definitely!

 eh, maybe

 nah

Is it ok to...

 yes, definitely!

 eh, maybe

 nah

Is it ok to... Use Generative AI to help draft an essay?

💖 yes, definitely!

👍 eh, maybe

😂 nah

Is it ok to...

 yes, definitely!

 eh, maybe

 nah

**Is it ok to... Use Generative AI to help
draft an essay about your personal
experiences?**

 yes, definitely!

 eh, maybe

 nah

What's OK or not (when you're in school)?

How to Use AI (and still learn stuff)



Follow the rules



+

If OK for your class...

Northeastern
Khoury College of
Computer Sciences



Do this

But!

Do this

- Help get started on a question

But!

The homework question

vote in this state in 2024, what percent of the vote would they collectively contribute?



To tackle this problem, you need to:

1. **Prompt the user for input:** State name, number of voters in 2020, and the percentage of the voting population that this represents.
2. **Compute various statistics:** Eligible voters, those who did not vote, expected voters in 2024 with a 3.2% decrease, and the percentage contribution of undergraduate students.

Outline/big picture suggestions; you put them together and fill in details

What are you learning?

The homework
question

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Do this

- Help get started on a question

But!

- Bias in AI models

Amazon's AI for hiring is biased against women



SAN FRANCISCO (Reuters) - Amazon.com Inc's machine-learning specialists uncovered a big problem: their new recruiting engine did not like women.

The team had been building computer programs since 2014 to review job applicants' resumes with the aim of mechanizing the search for top talent, five people familiar with the effort told Reuters.

Automation has been key to Amazon's e-commerce dominance, be it inside warehouses or driving pricing decisions. The company's experimental hiring tool used artificial intelligence to give job candidates scores ranging from one to five stars - much like shoppers rate products on Amazon, some of the people said.

What approach is chatGPT telling you to take on this homework?


Do this

- Help get started on a question
- Test your understanding

But!

- Bias in AI models
- Plagiarism?

Give me a quiz about this topic we just covered



give me a python quiz

Sure! Here's a Python quiz with a mix of questions that test different aspects of the language, from basic syntax to more advanced concepts. Try to answer these without looking up the answers to challenge yourself!

Python Quiz

1. Basic Syntax

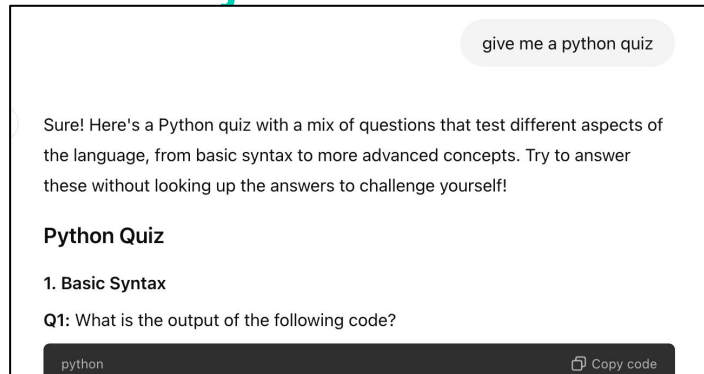
Q1: What is the output of the following code?

```
python
```

Copy code

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- Test your understanding

But!

- Bias in AI models
- Is it even right?

Lessons from people who believed the model



SAN FRANCISCO -- News outlet CNET said Wednesday it has issued corrections on a number of articles, including some that it described as "substantial," after using an artificial intelligence-powered tool to help write dozens of stories.

**These lawyers used ChatGPT to save time.
They got fired and fined.**

Artificial intelligence is changing how law is practiced, but not always for the better


Do this

- Help get started on a question
- Test your understanding
- Get another explanation/perspective on something from class

But!

- Bias in AI models
- Is it even right?

What'd Prof. Laney say about that thing in class?



what is a greedy algorithm



A **greedy algorithm** is a type of algorithmic strategy used to solve optimization problems. It makes a sequence of choices, each of which is locally optimal, with the hope that these local optima will lead to a globally optimal solution. Greedy algorithms are generally used when the problem can be broken down into smaller sub-problems that can be solved independently.

What are you learning?

What'd Prof. Laney
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But!

- Bias in AI models
- Is it even right?
- Does it even understand what you're asking?
- **Is it the only thing you're using?**

And now... A Deeper Dive into How AI Fails