

LifeSat, Happiness surveys

Thursday, March 16, 2023 12:37 AM

Where else can I find life satisfaction survey results or happiness survey results?

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

There are several organizations that conduct surveys on life satisfaction and happiness. For example, Ipsos conducts a global survey on happiness¹. The OECD also measures life satisfaction across its member countries through its Better Life Index².

Other sources of information on life satisfaction and happiness include the World Happiness Report⁵ and Our World in Data⁴. These organizations compile data from various sources to provide a comprehensive view of happiness and well-being around the world.

Is there anything else you need help with?

Source: Conversation with Bing, 3/16/2023

(1) Global happiness up six points since last year: 73% now say they are

<https://www.ipsos.com/en/global-happiness-six-points-last-year-73-now-say-they-are-happy> Accessed 3/16/2023.

(2) Life Satisfaction - OECD Better Life Index. <https://www.oecdbetterlifeindex.org/topics/life-satisfaction/> Accessed 3/16/2023.

(3) World Happiness Report 2020 | The World Happiness Report. <https://worldhappiness.report/ed/2020/> Accessed 3/16/2023.

(4) Happiness and Life Satisfaction - Our World in Data. <https://ourworldindata.org/happiness-and-life-satisfaction> Accessed 3/16/2023.

(5) (New) Happiness Survey - Large Scale Study Results. <https://www.trackinghappiness.com/happiness-survey-results/> Accessed 3/16/2023.

API happiness

Thursday, March 16, 2023 12:39 AM

Can you help me write API code to use <https://stats.oecd.org/> How's Life? well being data?

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

Searching for: OECD How's Life API

Searching for: OECD How's Life API

Generating answers for you...

Generating answers for you...

Yes, I can help you with that. [The OECD has application programming interfaces \(APIs\) that provide access to datasets in their catalogue of databases¹](#). You can use these APIs to query data in several ways by specifying parameters in your request.

Here's an example code snippet that shows how you can use Python to access OECD data:

```
import requests
import json
url = 'http://stats.oecd.org/SDMX-JSON/data/HSL/all/all?startTime=2010&endTime=2020&dimensionAtObservation=allDimensions'
response = requests.get(url)
data = json.loads(response.text)

# Accessing data
for key, value in data['dataSets'][0]['observations'].items():
    print(key, value[0])
```

This code retrieves data from the How's Life? well-being dataset for all countries and all dimensions between 2010 and 2020. You can modify the parameters in the URL to specify your request.

Is there anything else you need help with?

Received message. Yes, I can help you with that. The OECD has application programming interfaces (APIs) that provide access to datasets in their catalogue of databases. You can use these APIs to query data in several ways by specifying parameters in your request. Here's an example code snippet that shows how you can use Python to access OECD data:

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Learn more:

<1. data.oecd.org> <2. oecdbetterlifeindex.org> <3. oecd.org> <4. oecd.org> <5. stats.oecd.org>+1 more

Learn more:

<1. data.oecd.org><2. oecdbetterlifeindex.org><3. oecd.org><4. oecd.org> <5. stats.oecd.org>— see less

<https://data.oecd.org/api/> About the API OECD data for developers

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

1of15

Can you use Pandas to read data into a DataFrame?

Sent message. Can you use Pandas to read data into a DataFrame?

Yes, you can use the Pandas library to read data from the OECD API into a DataFrame. Here's an example code snippet that shows how you can do this:

```
import pandas as pd
import requests
url = 'http://stats.oecd.org/SDMX-JSON/data/HSL/all/all?startTime=2010&endTime=2020&dimensionAtObservation=allDimensions'
response = requests.get(url)
data = response.json()
# Convert data to DataFrame
df = pd.DataFrame(data['dataSets'][0]['observations']).T
df.columns = ['Value']
print(df.head())
```

This code retrieves data from the How's Life? well-being dataset for all countries and all dimensions between 2010 and 2020 and stores it in a Pandas DataFrame. You can then use Pandas' powerful data manipulation and analysis tools to work with the data.

Is there anything else you need help with?

Received message. Yes, you can use the Pandas library to read data from the OECD API into a DataFrame. Here's an example code snippet that shows how you can do this: ``python import pandas as pd import requests url = 'http://stats.oecd.org/SDMX-JSON/data/HSL/all/all?startTime=2010&endTime=2020&dimensionAtObservation=allDimensions' response = requests.get(url) data = response.json() # Convert data to DataFrame df = pd.DataFrame(data['dataSets'][0]['observations']).T df.columns = ['Value'] print(df.head()) `` This code retrieves data from the How's Life? well-being dataset for all countries and all dimensions between 2010 and 2020 and stores it in a Pandas DataFrame. You can then use Pandas' powerful data manipulation and analysis tools to work with the data. Is there anything else you need help with?

2of15

How do I create a DataFrame with only the Life Satisfaction column and Country name column?

Sent message. How do I create a DataFrame with only the Life Satisfaction column and Country name column?

Searching for: OECD How's Life API Life Satisfaction

Searching for: OECD How's Life API Life Satisfaction

Searching for: OECD How's Life API Life Satisfaction column name

Searching for: OECD How's Life API Life Satisfaction column name

Searching for: OECD How's Life API Country name column

Searching for: OECD How's Life API Country name column

Generating answers for you...

Generating answers for you...

I'm sorry, but I couldn't find specific information on the column names for the Life Satisfaction and Country name columns in the OECD How's Life? dataset. You may want to check the documentation for the OECD API or contact their support team for more information.

Is there anything else you need help with?

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Learn more:

[1. oecdbetterlifeindex.org](https://1.oecdbetterlifeindex.org)[2. oecd-ilibrary.org](https://2.oecd-ilibrary.org)[3. oecdbetterlifeindex.org](https://3.oecdbetterlifeindex.org)[4. oecd.org](https://4.oecd.org)[5. oecd-ilibrary.org](https://5.oecd-ilibrary.org)[6. oecdbetterlifeindex.org](https://6.oecdbetterlifeindex.org)[7. oecd.org](https://7.oecd.org)[8. oecdbetterlifeindex.org](https://8.oecdbetterlifeindex.org)[9. oecd-ilibrary.org](https://9.oecd-ilibrary.org)[10. oecdbetterlifeindex.org](https://10.oecdbetterlifeindex.org)

[oecd.org](#)11. [oecd-ilibrary.org](#)12. [data.oecd.org](#)+9 more

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From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

OECD User's Guide

Friday, March 17, 2023

6:53 PM



WBOS User
Guide (EN)

OECD data API user's guide

[OECD Statistics](#)

eia.gov, statista.com

Thursday, March 16, 2023 12:58 AM

What are good data sources for international trade volume and USD value for crude oil and LNG gas?

Sent message. What are good data sources for international trade volume and USD value for crude oil and LNG gas?

Searching for: data sources international trade volume crude oil LNG gas

Searching for: data sources international trade volume crude oil LNG gas

Generating answers for you...

Generating answers for you...

[Some good data sources for international trade volume and USD value for crude oil and LNG gas include Statista¹²³ and U.S. Energy Information Administration \(EIA\)⁴. The International Group of Liquefied Natural Gas Importers \(GIIGNL\) also publishes an annual report on global LNG trade volumes.](#)

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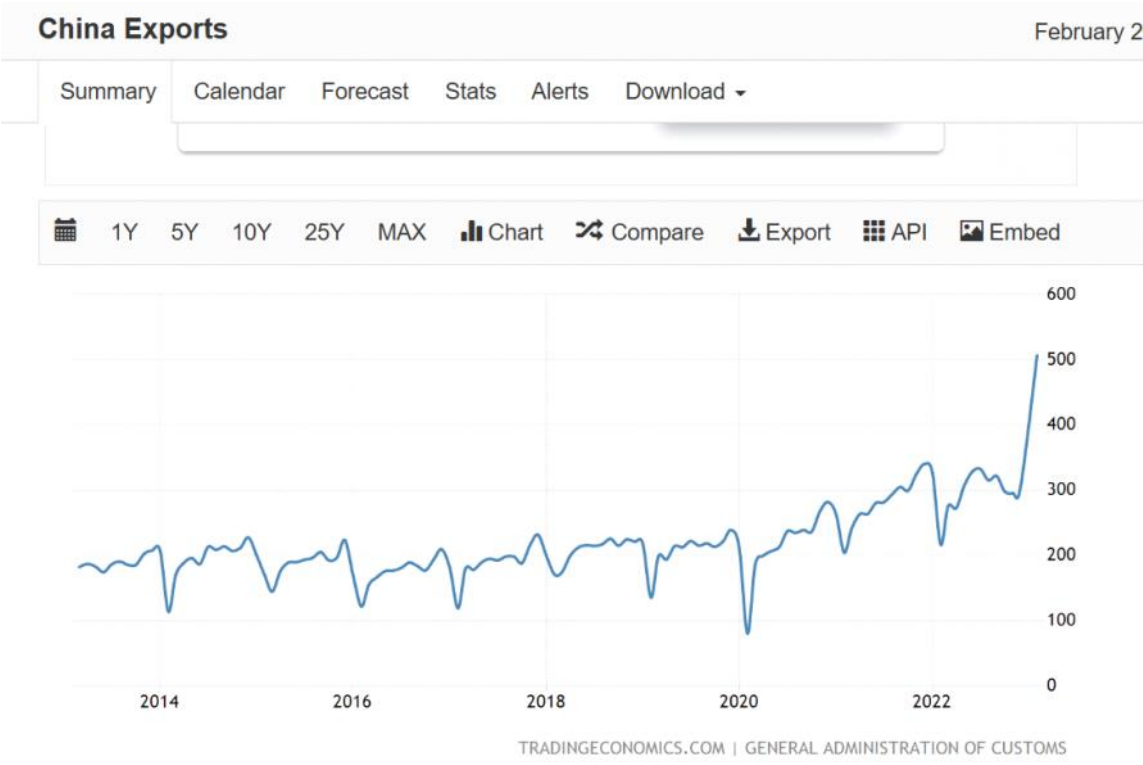
Learn more:

[1. statista.com](#)[2. statista.com](#)[3. statista.com](#)[4. eia.gov](#)[5. eia.gov](#)

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

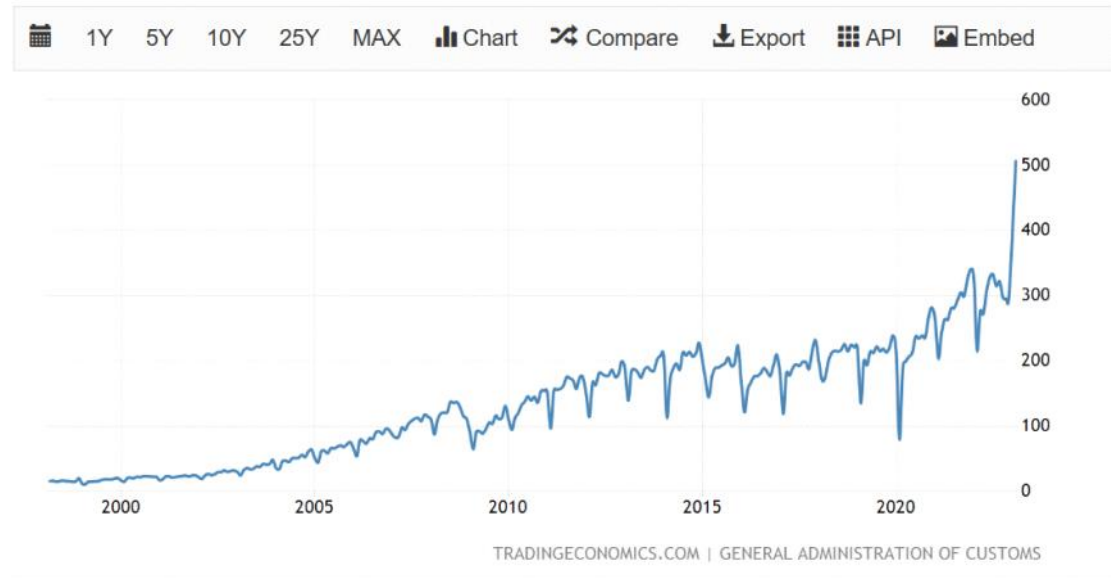
China Exports

Thursday, March 16, 2023 1:17 AM



Exports from China sank 6.8% to USD 506.3 billion in January-February 2023 compared to the same period a year earlier and market consensus of a 9.4% drop. Exports were down for a fourth consecutive month amid continued weakness in foreign demand, adding to government concerns that a global slowdown will weigh on the country's recovery. By commodity, sales were down for unwrought aluminum and products (-14.8%) and rare earths (-5.7%), but were up for refined products (74.2%) and steel products (49%). Among major trade partners, exports to the United States tumbled 21.8%, while those to the EU and Japan fell 12.3% and 1.6%, respectively. Meanwhile, sales to ASEAN were up 9% and those to Russia rose 19.8%. source: [General Administration of Customs](#)

From <<https://tradingeconomics.com/china/exports>>



[China Exports - February 2023 Data - 1981-2022 Historical - March Forecast - Calendar \(tradingeconomics.com\)](#)

Export trade in China - statistics & facts

Published by
[Yihan Ma](#)



Dec 14, 2022

In 2009, China overtook Germany as the largest exporting nation worldwide. Since 2014, China has been not only the world's largest exporter but also the largest trading nation in terms of the sum of its exports and imports. Despite the ongoing coronavirus pandemic, 2021 was another remarkable year in terms of international trade. [China's exports of goods](#) totaled a record high of 3.36 trillion U.S. dollars, nearly 30 percent more than the previous year. That year, [China's export of goods and services constituted 19 percent of the GDP](#). A country's economy is considered relatively open if its exports made up around 15 percent or more of its GDP.

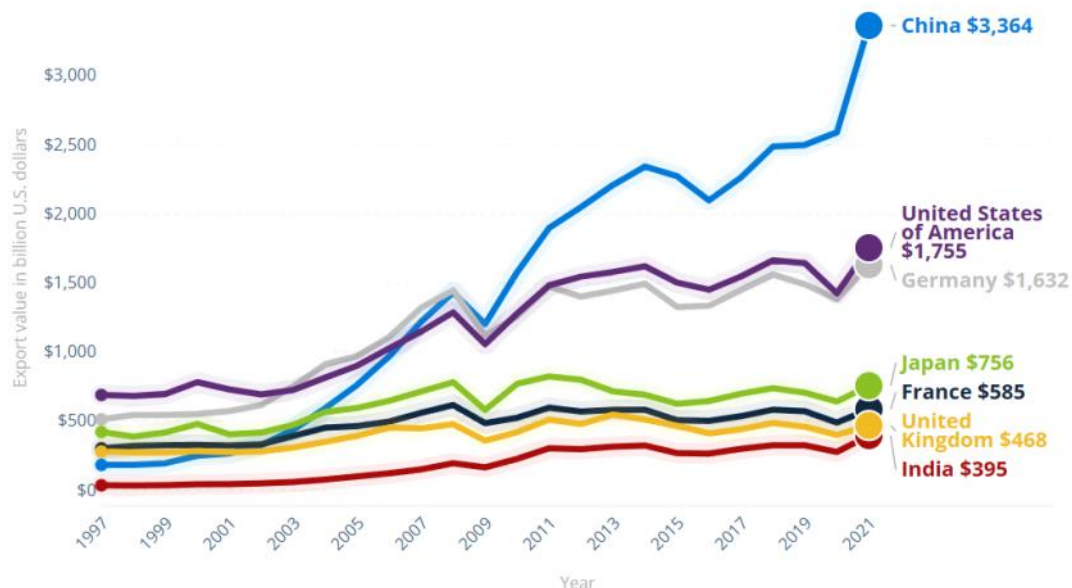
Merchandise and service exports from China

From <https://www.statista.com/topics/1456/export-in-china/#dossierKeyfigures>

The origin story of the "world's factory"

Value of merchandise exports by leading economies in billion U.S. dollars

Replay



Source: [WTO Stats](#)

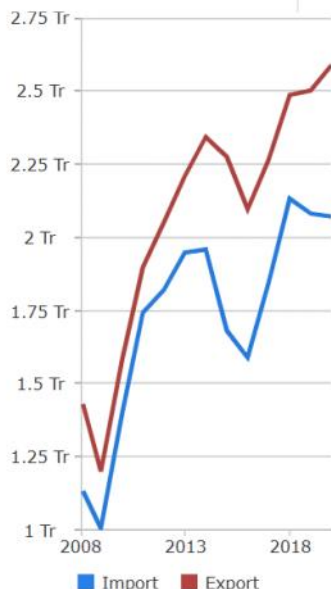
China's export partners

The United States continued to be [China's leading export market](#) in 2021, with exports totaling more than 3.7 trillion yuan. A total of 171 billion dollars worth of pharmaceutical preparations were imported by the U.S. from China in 2021, making it [the most imported goods from China](#). The European Union and ASEAN ranked second and third among China's export destinations, with an export value of more than three trillion yuan each. Meanwhile, owing to the successful launch and expansion of the Belt and Road Initiative, China has opened up new markets in the Middle East and Africa. In 2021, [China exported around 6.6 trillion yuan worth of commodities to the countries of the Belt and Road Initiative](#).

This text provides general information. Statista assumes no liability for the information given being complete or correct. Due to varying update cycles, statistics can display more up-to-date data than referenced in the text.

From <https://www.statista.com/topics/1456/export-in-china/#dossierKeyfigures>

IMPORTS/EXPORTS



TRADE SUMMARY FOR CHINA 2020

Overall Exports and Imports for China 2020

Exports and imports of China in 2020 are below, along with number of countries and products

- The total value of **exports** ^① (FoB) was 2,589,098 million.
- The total value of **imports** ^① (CIF) was 2,069,568 million.
- At the **HS6 digit** level, 4,400 products were exported to 214 countries and 4,410 products were imported from 214 countries.

China top 5 Export and Import partners 2020

Top five countries to which China **exported** in 2020 are below, along with the percent of total exports that went to that country:

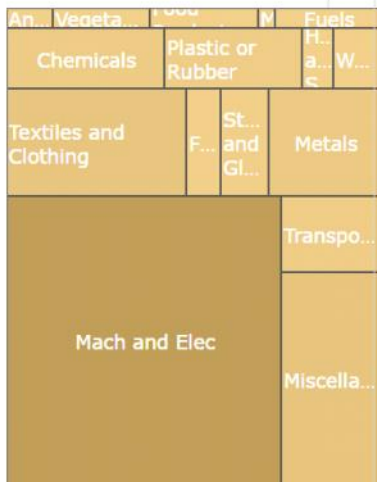
- China exports to United States** worth US\$ 452,493 million, with a **partner share** of 17.48 percent.
- China exports to Hong Kong, China** worth US\$ 271,708 million, with a **partner share** of 10.49 percent.
- China exports to Japan** worth US\$ 142,597 million, with a **partner share** of 5.51 percent.
- China exports to Vietnam** worth US\$ 113,815 million, with a **partner share** of 4.40 percent.
- China exports to Korea, Rep.** worth US\$ 112,476 million, with a **partner share** of 4.34 percent.

Top five countries from which China **imported** goods in 2020 are below, along with percent of total imports that came from the country:

- China imports from Other Asia, nes** worth US\$ 200,498 million, with a **partner share** of 9.69 percent.
- China imports from Japan** worth US\$ 174,655 million, with a **partner share** of 8.44 percent.
- China imports from Korea, Rep.** worth US\$ 173,100 million, with a **partner share** of 8.36 percent.
- China imports from United States** worth US\$ 136,340 million, with a **partner share** of 6.59 percent.
- China imports from China** worth US\$ 125,264 million, with a **partner share** of 6.05 percent.

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PRODUCTS



China Top 5 Productsexports imports at HS 6 digit level 2020

The **top five exported** HS 6 digit level products to world by China along with trade value are:

- China exported **Transmission apparatus, for radioteleph incorpo**, worth US\$ 176,416,596.53 million.
- China exported **Monolithic integrated circuits, digital**, worth US\$ 117,640,236.61 million.
- China exported **Storage units, whether or not presented with th**, worth US\$ 115,316,392.65 million.
- China exported **Parts and accessories of automatic data process**, worth US\$ 73,194,271.68 million.
- China exported **Made up articles (incl. dress patterns), nes**, worth US\$ 53,720,966.28 million.

The **top five imported** HS 6 digit level products from world by China along with trade value are

- China imported **Monolithic integrated circuits, digital**, worth US\$ 350,291,022.82 million.
- China imported **Petroleum oils and oils obtained from bituminou**, worth US\$ 178,452,854.86 million.
- China imported **Non-agglomerated iron ores and concentrates**, worth US\$ 117,933,229.00 million.
- China imported **Parts and accessories of automatic data process**, worth US\$ 48,242,182.01 million.
- China imported **Soya beans**, worth US\$ 39,545,574.15 million.

Exports and Imports of Product Groups 2020

Exports and imports of products by stages of processing in 2020 are below along with their corresponding **Product Share** ^① as percent of total export or import

- China Raw materials exports** were worth US\$ 40,869 million, **product share** of 1.58%.
- China Raw materials imports** were worth US\$ 530,609 million, **product share** of 25.64%.
- China Intermediate goods exports** were worth US\$ 387,085 million, **product share** of 14.95%.
- China Intermediate goods imports** were worth US\$ 398,334 million, **product share** of 19.25%.
- China Consumer goods exports** were worth US\$ 944,933 million, **product share** of 36.50%.
- China Consumer goods imports** were worth US\$ 282,547 million, **product share** of 13.65%.
- China Capital goods exports** were worth US\$ 1,191,214 million, **product share** of 46.01%.

TRADE SUMMARY FOR CHINA 2004

Overall Exports and Imports for China 2004

Exports and imports of China in 2004 are below, along with number of countries and products

- The total value of **exports** ^① (FoB) was 593,326 million.
- The total value of **imports** ^① (CIF) was 561,229 million.
- At the **HS6 digit** level, 4,732 products were exported to 209 countries and 4,750 products were imported from 197 countries.

China top 5 Export and Import partners 2004

Top five countries to which China **exported** in 2004 are below, along with the percent of total exports that went to that country:

1. **China exports to United States** worth US\$ 125,149 million, with a **partner share** of 21.09 percent.
2. **China exports to Hong Kong, China** worth US\$ 100,869 million, with a **partner share** of 17.00 percent.
3. **China exports to Japan** worth US\$ 73,509 million, with a **partner share** of 12.39 percent.
4. **China exports to Korea, Rep.** worth US\$ 27,812 million, with a **partner share** of 4.69 percent.
5. **China exports to Germany** worth US\$ 23,756 million, with a **partner share** of 4.00 percent.

Top five countries from which China **imported** goods in 2004 are below, along with percent of total imports that came from the country :

1. **China imports from Japan** worth US\$ 94,327 million, with a **partner share** of 16.81 percent.
2. **China imports from Other Asia, nes** worth US\$ 64,759 million, with a **partner share** of 11.54 percent.
3. **China imports from Korea, Rep.** worth US\$ 62,234 million, with a **partner share** of 11.09 percent.
4. **China imports from United States** worth US\$ 44,748 million, with a **partner share** of 7.97 percent.
5. **China imports from China** worth US\$ 38,655 million, with a **partner share** of 6.89 percent.

China Top 5 Productsexports imports at HS 6 digit level 2004

The **top five exported** HS 6 digit level products to world by China along with trade value are:

1. **China exported Parts and accessories of automatic data process** , worth US\$ 23,878,285.05 million.
2. **China exported Digital auto data process mach cntg in the same** , worth US\$ 22,990,595.97 million.
3. **China exported Input or output units, whether or not presented** , worth US\$ 22,657,029.42 million.
4. **China exported Transmission apparatus, for radioteleph incorpo** , worth US\$ 16,277,297.78 million.
5. **China exported Parts suitable for use solely or princ with the** , worth US\$ 11,515,198.12 million.

The **top five imported** HS 6 digit level products from world by China along with trade value are

1. **China imported Monolithic integrated circuits, digital** , worth US\$ 37,596,848.31 million.
2. **China imported Petroleum oils and oils obtained from bituminou** , worth US\$ 33,911,681.06 million.
3. **China imported Optical devices, appliances and instruments, ne** , worth US\$ 21,205,393.25 million.
4. **China imported Monolithic integrated circuits, nes** , worth US\$ 17,270,449.75 million.
5. **China imported Parts and accessories of automatic data process** , worth US\$ 13,752,597.14 million.

Exports and Imports of Product Groups 2004

Exports and imports of products by stages of processing in 2004 are below along with their corresponding **Product Share** ^① as percent of total export or import

- **China Raw materials exports** were worth US\$ 18,695 million, **product share** of 3.15%.
- **China Raw materials imports** were worth US\$ 87,741 million, **product share** of 15.63%.
- **China Intermediate goods exports** were worth US\$ 97,521 million, **product share** of 16.44%.
- **China Intermediate goods imports** were worth US\$ 145,141 million, **product share** of 25.86%.
- **China Consumer goods exports** were worth US\$ 231,718 million, **product share** of 39.05%.

Global Trade

Sunday, May 7, 2023 5:17 PM



Trade_OEC
D_2023_...

Toolformer public access

Thursday, March 16, 2023 1:03 AM

Is the Toolformer model open to the public?

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

[Yes, it appears that there is an open-source implementation of Toolformer available on Open Source Agenda](#)¹. [There is also a GitHub repository for an implementation of Toolformer by lucidrains](#)². Is there anything else you would like to know?

Received message. Yes, it appears that there is an open-source implementation of Toolformer available on Open Source Agenda. There is also a GitHub repository for an implementation of Toolformer by lucidrains. Is there anything else you would like to know?

Learn more:

[1. opensourceagenda.com](#)². [github.com](#)³. [twitter.com](#)⁴. [gpt3demo.com](#)⁵. [arxiv.org](#)⁶. [arxiv.org](#)⁶+3 more

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

Can you find reviews of Toolformer model from Meta AI?

I found some information about Toolformer model from Meta AI. [It is a model that self-learns to use external tools such as search engines, calculators, and translation systems via API calls to enhance its performance on various downstream tasks](#)¹. [It is based on a pre-trained GPT-J model with 6.7 billion parameters](#)². However, I couldn't find any reviews of this model. Would you like more information about Toolformer?

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

Searching for: Toolformer blog posts

Searching for: Toolformer blog posts

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I found some blog posts about Toolformer. [One is by Michael Spencer titled "What is Toolformer?"](#)¹. [Another one is from Marktechpost.com titled "Meta AI and UPF Researchers Introduce Toolformer: A Language Model That Learns in a Self-Supervised Way How to Use Different Tools Such as Search Engines via Simple API Calls"](#)². Would you like more information about these blog posts?

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Learn more:

[1. offthegridxp.substack.com](#)². [marktechpost.com](#)³. [twitter.com](#)⁴. [github.com](#)⁵+1 more

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

Searching for: Toolformer model Meta AI reviews

Searching for: Toolformer model Meta AI reviews

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I found some information about Toolformer model from Meta AI. [It is a model that self-learns to use external tools such as search engines, calculators, and translation systems via API calls to enhance its performance on various downstream tasks](#)¹. It is based on a pre-trained GPT-J model with 6.7 billion parameters². However, I couldn't find any reviews of this model. Would you like more information about Toolformer?

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Learn more:

[1. marktechpost.com](#)². [arstechnica.com](#)³. [thesequence.substack.com](#)⁴. [gpt3demo.com](#)⁵. [arxiv.org](#)⁶+3 more

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

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Learn more:

[1. marktechpost.com](#)[2. arstechnica.com](#)[3. thesequence.substack.com](#)[4. gpt3demo.com](#)[5. arxiv.org](#)+3 more

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

In the blog post by Michael Spencer titled “What is Toolformer?”, he explains that Toolformer is based on self-supervised text annotations and is more scalable than OpenAI’s previous solution known as GPT-4. In the blog post from Marktechpost.com titled “Meta AI and UPF Researchers Introduce Toolformer: A Language Model That Learns in a Self-Supervised Way How to Use Different Tools Such as Search Engines via Simple API Calls”, it explains that the Toolformer methodology uses in-context learning techniques as its foundation to create complete datasets from scratch. Given a few manually written examples that show how to use a specific API, the LLM annotates a large language modeling dataset with probable API calls. Is there anything else you would like to know?

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

<<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

Toolformer Huggingface

Thursday, March 16, 2023 9:03 PM

This is the best byte pair encoding video I've found: <https://youtu.be/HEikzVL-IZU>

She's at Hugging Face. Her animations of the process are very clear.

From Antigona Ulndreaj to Everyone 08:55 PM

That makes sense

From Pankaj to Everyone 09:02 PM

I found the implementation of it here: <https://github.com/lucidrains/toolformer-pytorch>

Github Copilot

Thursday, March 16, 2023 12:50 AM

Learn more:

[1. blog.openreplay.com](#)[2. towardsdatascience.com](#)[3. analyticsindiamag.com](#)[4. dev.to](#)[5. realpython.com](#)[6. blog.logrocket.com](#) — see less

1 of 15

From <<https://www.bing.com/search?form=MY0291&OCID=MY0291&q=Bing+AI&showconv=1>>

Pros

1. Repetitive code auto-fills: GitHub Copilot is excellent for quickly creating repetitive code patterns. You only need to provide a few examples, and Copilot will handle the rest.
2. Alternatives are generated: Copilot will display a list of alternatives when you write a code line. You can select one of them or stick to your code if you believe it is superior. In any case, Copilot will learn and try to adapt to your preferences.
3. It makes it easier to run tests with little effort: When you import a unit test package, GitHub Copilot will recommend tests that match your code.
4. Speaks all of your favorite programming languages: Copilot understands many languages, including Python, TypeScript, JavaScript, Ruby, and Go. It can assist you in navigating almost any situation. Check out this [link](#)
5. Write on your favorite Editor: Copilot integrates with your IDE tools directly into your editor, including Neovim, JetBrains, Visual Studio, and Visual Studio Code.

Cons

1. Uncertainty in terms of quality: GitHub Copilot generates suggestions. However, it cannot test its code, so it may not even run or compile.
2. Copyright issues are violated: According to GitHub, the suggestions may contain exactly from the training set 0.1% of the time. One of the major concerns about the Copilot is that it could infringe on intellectual property rights or launder open-source code into commercial use without proper licensing.
3. It will not make you a good developer: This is similar to the two sides of coins. On the one hand, the tool will help you increase productivity and get recommendations to learn from. On the other hand, this is similar to copying and pasting from Stackoverflow.
4. Dangerous to work with Copilot: Copilot is dangerous to new developers as it doesn't teach you how to code; it just codes for you to solve your issues.

Is GitHub Copilot a Threat to Developers?

How much of a threat (if any at all) is it?

Can the Copilot replace the developers?

GitHub Copilot is an intriguing advancement in software engineering, even if it isn't entirely on point right now. According to the FAQ, the system gets the generation right about half the time, and it is advised to be cautious of the generated code. If we look at GitHub Copilot differently, we can see this as a new programming language. Using this input, the documentation and function names are translated into source code for another programming language.

Even if everything one day works seamlessly on a larger scale, the generated code will still require developers to handle the direction it takes and connect the bigger picture altogether.

Code problems

Because Copilot is trained on open-source code available on GitHub, the researchers hypothesize that the variable security quality stems from the nature of the community-provided code. "Because code frequently contains bugs, given the vast amount of checkout code that

Copilot has processed, it is certain that the language model has learned from exploitable, buggy code.”

This means that GitHub Copilot was trained on unfiltered sets of repositories that may have contained unsecured coding patterns. Whoever approved training Copilot on such repositories is probably regretting their decision now.

Why Copilot writes bad code

In short, GitHub Copilot has adopted the bad habits of human developers. And, because there is no peer review, buggy code may be accepted in some cases. “Generally, Copilot should be paired with proper security-awareness tools throughout both training and generation to reduce the risk of introducing security vulnerabilities,” the researchers concluded.

Problems with auto-generated code

Copilot generates code based on the description provided by human developers. It can also predict the following line of code from hints such as variable and function names. It is not the same as autocompletion; its function is more interpretive.

However, GitHub stated on its official blog that Copilot is trained on public code, which may contain insecure coding patterns, bugs, or outdated code API references; the tool can also regenerate code that contains similar patterns.

Cognitive Bias and AI Pair programming

An AI pair programmer must be able to collaborate effectively with humans. Likewise, vice versa. On the other hand, humans have two cognitive biases that make this difficult: automation bias and anchoring bias. Because of this pair of human flaws, we tend to over-rely on Copilot’s suggestions, even if we try not to.

When we type into visual studio code, Copilot jumps in and suggests code completions entirely automatically and without our intervention. That often means that Copilot has already plotted a route for us before we have had a chance to think about it. This is not only the “first piece of information” we’re receiving, but it’s also an example of “suggestions from automated decision-making systems” - we are getting a double dose of cognitive biases to overcome! And it doesn’t happen just once, but every time we type a few more words in our text editor.

So GitHub can’t simply fix this by carefully presenting Copilot recommendations and educating users.

In unfamiliar territory, code with confidence

While learning a new language or just getting started with coding, GitHub Copilot can help you find your way without constantly searching the Internet for answers. GitHub Copilot learns how you write code and can auto-complete a code snippet or an entire function. In this way, Copilot lets you quickly discover alternative ways to solve programming problems.

Conclusion

GitHub Copilot will usher in many changes in the industry, but the extent to which those changes will be beneficial or detrimental is unknown. Today, GitHub Copilot is not a threat to developers various that have been present. But over a generation of time, it will keep becoming better.

GitHub Copilot generates code from the public GitHub repository while you are working with your favorite editors, and as far as my concerns, Copilot is an excellent tool like a compiler... but due to its working nature, it will threaten developers around the world.

A TIP FROM THE EDITOR: If you want to use Copilot with Visual Studio Code, check out our [Top Visual Studio Code Extensions For Developers In 2022](#) article for more on that.

From <<https://blog.openreplay.com/is-github-copilot-a-threat-to-developers/>>

Github Copilot

Thursday, March 16, 2023 12:04 AM

Jeremy Howard doesn't like it. Not good for creating quality code. Creates bulky, error prone code. Not efficient.

Could be good for a new language, where basic syntax and idiom is all that is needed.

Boilerplate code in GO could be good. Python has meta programming so boilerplate code can be avoided.

Searching on Stackoverflow is better for learning to use code efficiently.

Microsoft API Usage Examples is promising.

Helps you use new API to get stuff done. Example code.

Maybe search for API to use OECD happiness index data? March 2023.

Bing AI

Thursday, March 16, 2023 1:50 AM

As is to be expected, users are also coming to Bing to chat with the infamous (wrong word) search engine. On a daily basis, roughly one third of people use Bing chat with an average of three chats per session. Bing has registered more than 45 million chats since the preview began on Feb. 7. (2/7/2023)

From <<https://gizmodo.com/microsoft-bing-surpasses-100-million-daily-active-users-1850206640>>

Microsoft CEO Satya Nadella's pursuit of Google reached a new milestone this week after the company announced that its AI-powered Bing search engine had surpassed 100 million daily active users.

From <<https://gizmodo.com/microsoft-bing-surpasses-100-million-daily-active-users-1850206640>>

Google has over 1 billion daily active users.

Google retains an 83.84% share of the global market, although this has fallen from 89.95% in the past three years; during the same timeframe, Bing's share has risen from 3.99% up to 8.88%.

From <https://www.google.com/search?q=Google+trends+Google+search+users+vs+Bing&rlz=1C1CHBF_enUS1010US1010&oq=Google+trends+Google+search+users+vs+Bing&aqs=chrome..69i57j69i64.31929j1j7&sourceid=chrome&ie=UTF-8>

Bing AI use cases

Friday, March 17, 2023 10:34 PM

Generate questions and answers for studying (ref to articles/chapter).

Discuss issue with famous persons, tell AI to reply as Socrates or Ghandi.

Write List of ingredients, outline tasks, list possible answers, etc.

With YouTube open, get information about video (from transcript), lookup info referenced in the video, get site statistics, find info about speaker.

On any webpage, get meta information about the page, ask questions about the content, lookup related information (highlight text).

Bing Dev Mode (hover over top-right) Bing icon on Edge Browser.
Get more info on any webpage, content that is open. Can be a whole book.

Write a poem that rymes.

Create a graph or table using any information that is on a webpage.

Upload an image and get info about it, or modify an image gen.

Bloomberg GPT

Sunday, May 7, 2023 5:20 PM

Large Language Model for Finance, Bloomberg



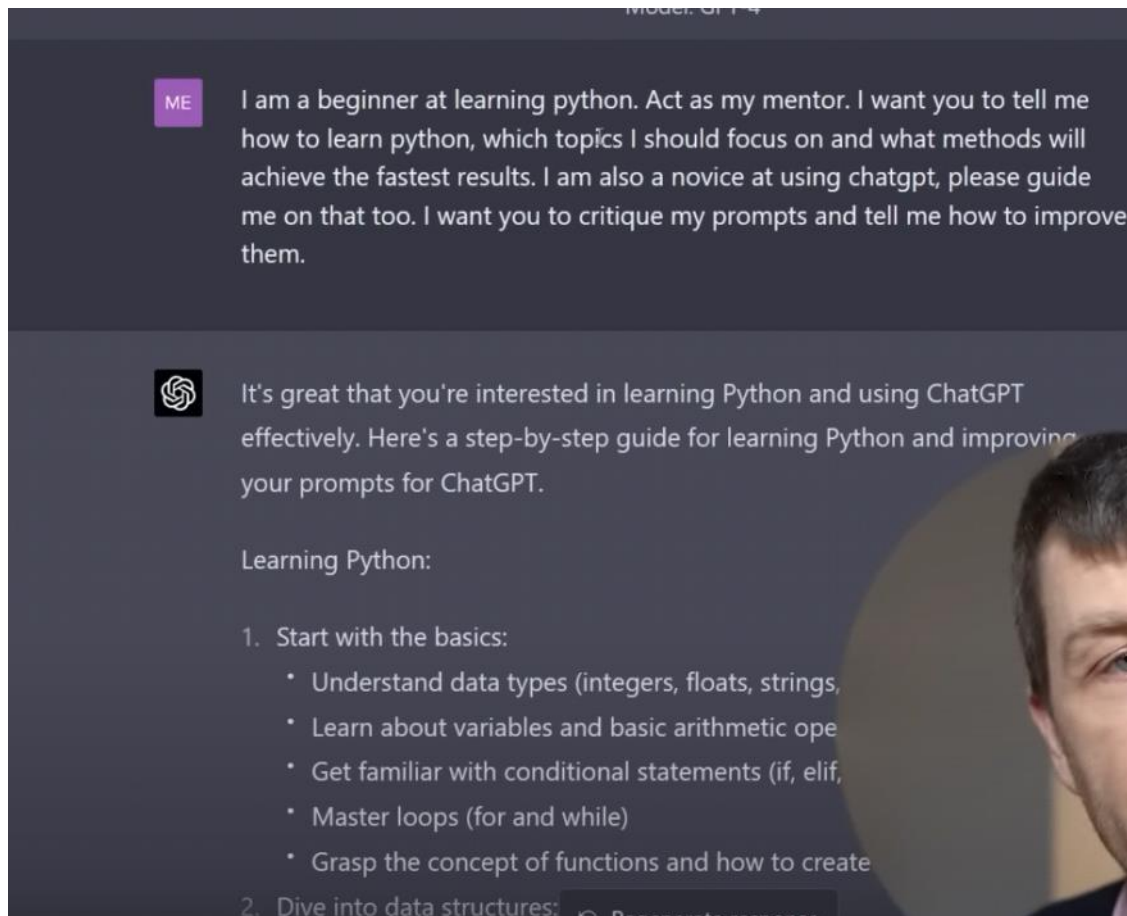
Bloomberg
GPT_230...

AI mentor

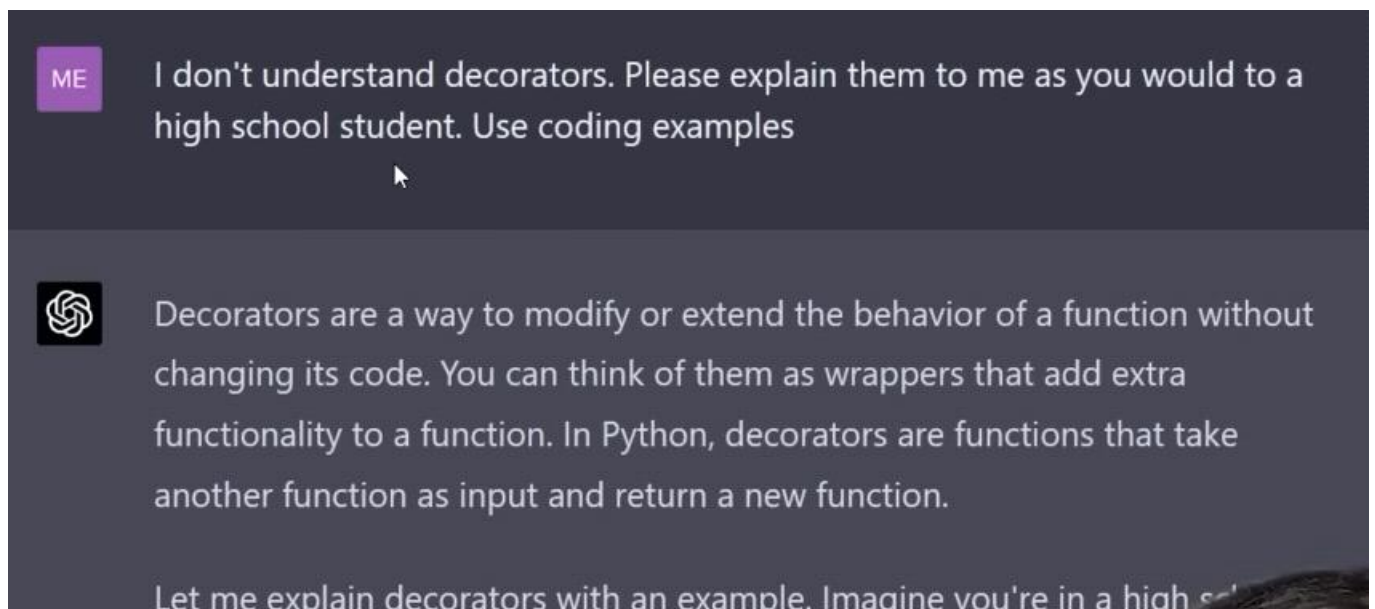
Friday, May 5, 2023

5:32 PM

1) Create a study plan



2) Ask it to explain a specific concept



Let me explain decorators with an example. Imagine you're in a high school play, and your role requires you to wear a costume. The costume is like a decorator: it doesn't change who you are, but it adds something to your appearance.

Here's a simple example of a decorator:

python

```
def my_decorator(func):
```

```
    def wrapper():
```

```
        print("Something is happening before the function is called.")
```

🔄 Regenerate response

python

```
def my_decorator(func):
```

```
    def wrapper():
```

```
        print("Something is happening before the function is called.")
```

```
        func()
```

```
        print("Something is happening after the function is called.")
```

```
    return wrapper
```

```
def say_hello():
```

```
    print("Hello!")
```

```
# Applying the decorator to the function
```

```
say_hello = my_decorator(say_hello)
```

🔄 Regenerate response

2b) Ask it to explain a code snippet:

code you'd like me to explain, and I'll be happy to help you understand it.

ME

```
class Solution:
    def isValid(self, s: str) -> bool:
        stack = []

        for c in s:
            if c == '(':
                stack.append('(')
            elif c == '{':
                stack.append('{')
            elif c == '[':
                stack.append '[')
            elif not stack or stack.pop() != c:
                return False
```


precise seeking

return not stack

return False


return not stack



This code defines a Python class named `Solution`, which has a single method `isValid`. The purpose of this method is to determine if the given input string `s` contains a valid sequence of parentheses. It checks whether the parentheses in the string are properly balanced and nested (i.e., every opening parenthesis has a matching closing parenthesis). 

Here's a step-by-step explanation of the code:

1. `class Solution:` creates a new class named `Solution`.
2. `def isValid(self, s: str) -> bool:` defines a method `isValid` within the `Solution` class. This method takes a string `s` as input and returns a boolean value (True or False).
3. `stack = []` initializes an empty list called `stack`. This list acts as a stack data structure to keep track of the opening parentheses.
4. `for c in s:` iterates through each character `c` in the string `s`.
5. The following conditions check the current character `c`:
 - If `c` is an opening parenthesis (i.e., `'('`, `'['`, or `'{'`), the code pushes it onto the `stack`.
 - If `c` is a closing parenthesis (i.e., `)`, `]`, or `}`, the code checks if the `stack` is empty. If it is not empty, it pops the top element from the `stack` and compares it with `c`. If they match, it continues; otherwise, it returns `False`.
 - If the `stack` is not empty and `c` is not a closing parenthesis, it returns `False`.

 Regenerate response



Here's a step-by-step explanation of the code:

1. `class Solution:` creates a new class named `Solution`.
2. `def isValid(self, s: str) -> bool:` defines a method called `isValid` within the `Solution` class. This method takes a string `s` as input and returns a boolean value (True or False).
3. `stack = []` initializes an empty list called `stack`. This will be used as a stack data structure to keep track of the opening parentheses.
4. `for c in s:` iterates through each character `c` in the input string `s`.
5. The following conditions check the current character `c`:
 - If `c` is an opening parenthesis (i.e., '(', '{', or '['), the corresponding closing parenthesis is appended to the `stack`.
 - If `c` is a closing parenthesis, there are two sub-conditions:
 - If the `stack` is empty (`not stack`) or the top element is not equal to the current closing parenthesis, the function returns `False`. This means that the string is not balanced or properly nested.
 - If the top element in the stack matches the current closing parenthesis, the `stack` is popped (i.e., the matching opening parenthesis is removed).

3) Plan steps for a new project. Get hints for setup.

ME

I'm trying to code a tictactoe game to help my learning but I can't figure out the steps involved please give me some hints and advice without telling me the solution



Of course! Designing a Tic-Tac-Toe game is a great exercise to practice programming concepts. Here's an outline of the steps you can follow with some hints to help you along the way:

1. Set up the game board:


- Represent the board using a data structure (e.g., a dictionary with keys as tuples)
- Create a function to initialize an empty board with empty strings or None)

2. Display the board:

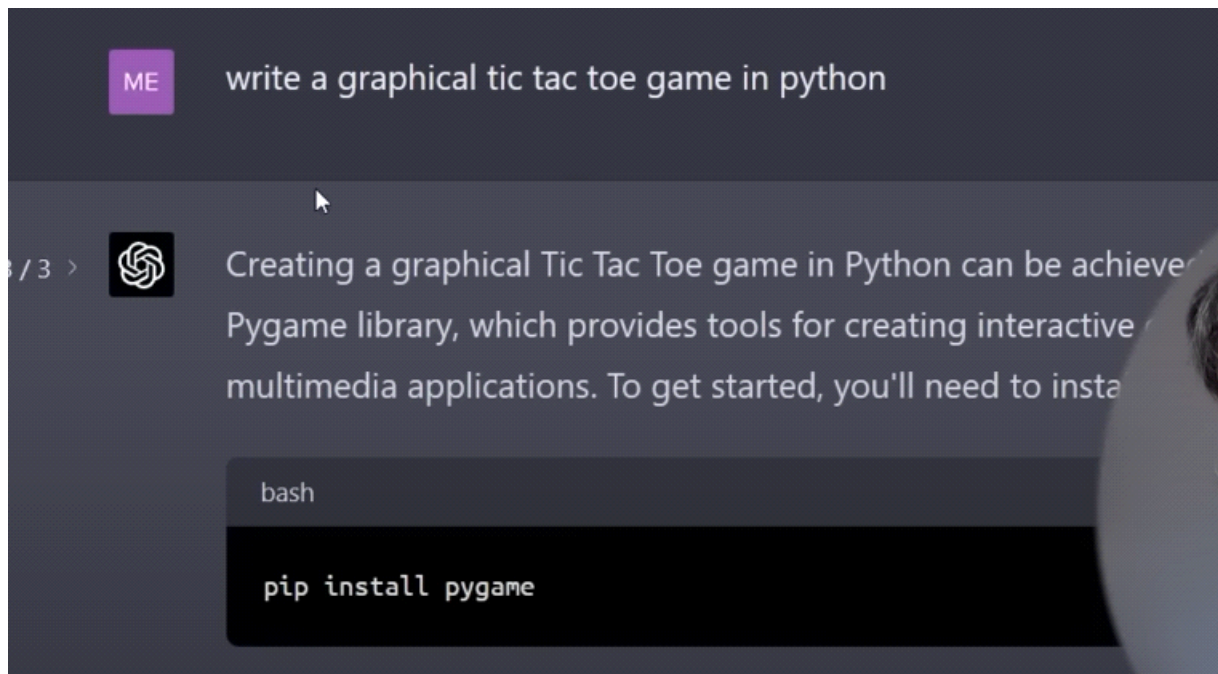
- Create a function to print the board with row and column numbers for easier input

🔄 Regenerate response

2. Display the board:
 - Create a function to print the board in a human-readable format, with row and column numbers for easier input
3. Define the game loop:
 - The game loop should run until there's a winner, or the board is full (a draw)
 - Alternate between players (X and O) on each iteration
4. Get player input:
 - Inside the game loop, ask the current player for their move (row and column)
 - Validate the input (e.g., check if it's within the board's range and if the chosen cell is empty)
 - If the input is valid, update the board with the player's move
5. Check for a win or draw:
 - After each move, create a function to check if the current player has won by forming a row, column, or diagonal with their pieces
 - You can use loops or list comprehensions to check for wins
 - If there's a winner, display a message and break the game loop
 - If the board is full and there's no winner, display a message and end the game
6. Play again (optional):

 Regenerate response

3b) White full short game program:



4) Create flash-cards, recall blank space cards.
Copy working code, and ask AI to randomly blank key logic code.
Then write those sections myself.
Or write tests and ask AI to write code to pass those tests.

Good GPT?

Sunday, May 7, 2023 5:11 PM

Place for good GPT dialogue. Image saved to iPad

Modular.AI

Sunday, May 7, 2023 5:12 PM

mojo -> faster AI, uses all main Python libraries.

Platform Game JS

Sunday, April 2, 2023 6:55 PM

I want to create an interactive platform game using only html, css, and javascript. Please write introductory code for me and what files to paste it to.

From <<https://chat.openai.com/chat/f3f62545-553d-44a1-85a5-68b3df04502d>>

To create an interactive platform game using HTML, CSS, and JavaScript, you can start by creating a basic HTML file with the necessary structure and adding CSS and JavaScript files to it. Here's some introductory code to get you started: HTML file (index.html):

From <<https://chat.openai.com/chat/f3f62545-553d-44a1-85a5-68b3df04502d>>

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Platform Game</title>
    <link rel="stylesheet" href="styles.css">
  </head>
  <body>
    <canvas id="gameCanvas"></canvas>
    <script src="game.js"></script>
  </body>
</html>
```

html  Copy code


```
<!DOCTYPE html>
<html>
  <head>
    <title>My Platform Game</title>
    <link rel="stylesheet" href="styles.css">
  </head>
  <body>
    <canvas id="gameCanvas"></canvas>
    <script src="game.js"></script>
  </body>
</html>
```

CSS file (styles.css):

From <<https://chat.openai.com/chat/f3f62545-553d-44a1-85a5-68b3df04502d>>

```
#gameCanvas {  
  border: 1px solid black;  
}
```

CSS

 Copy code

```
#gameCanvas {  
  border: 1px solid black;  
}
```

JavaScript file (game.js):

From <<https://chat.openai.com/chat/f3f62545-553d-44a1-85a5-68b3df04502d>>

```
// Define canvas and context variables  
var canvas = document.getElementById("gameCanvas");  
var ctx = canvas.getContext("2d");
```

```
// Define game loop function  
function gameLoop() {  
  // Clear canvas  
  ctx.clearRect(0, 0, canvas.width, canvas.height);
```

```
  // Draw game objects
```

```
  // Update game state
```

```
  // Call game loop again  
  requestAnimationFrame(gameLoop);  
}
```

```
// Call game loop to start the game  
requestAnimationFrame(gameLoop);
```



```
// Define canvas and context variables
var canvas = document.getElementById("gameCanvas");
var ctx = canvas.getContext("2d");

// Define game loop function
function gameLoop() {
    // Clear canvas
    ctx.clearRect(0, 0, canvas.width, canvas.height);

    // Draw game objects
    |

    // Update game state


    // Call game loop again
    requestAnimationFrame(gameLoop);
}

// Call game loop to start the game
requestAnimationFrame(gameLoop);
```

This code sets up the basic structure of an HTML file with a canvas element and includes a CSS file to add a border to the canvas. The JavaScript file defines a game loop function and starts the game by calling the game loop using the `requestAnimationFrame` method.

To get started with your platform game, you can add additional JavaScript code to create and control game objects, such as the player, enemies, and obstacles. You can also add event listeners to handle user input and collisions between objects.

Note that while HTML, CSS, and JavaScript can be used to create simple games, for more complex games, you may want to consider using a game engine or library like Phaser or Unity.

From <<https://chat.openai.com/chat/f3f62545-553d-44a1-85a5-68b3df04502d>>

Anthropic 100K token

Monday, May 15, 2023 8:16 PM

Anthropic AI (free) increase token limit to 100K, ~75K words, ~240 pages.
Can write a short novel.

ARCode Geo API

Monday, May 15, 2023 8:18 PM

ARCode AI

Can superimpose space invaders game over current view (AR) also over generated nature scenes (Geospatial)

Google Earth connected? Use for game with NICFI Amazonia scenery data.