Presidential Election and AI Companies

Agenda

1. Presidential election data
2. Red and blue distribution map
3. Comparing the changes in swing states between the two elections
4. Google search (Election polls)
5. Financial statements of AI companies before and after the election
6. Project 2025

Our team began by using the OpenAI API to collect information about the 2024 U.S. presidential election, with a primary focus on data from swing states. We then conducted a secondary analysis using Google Search, effectively performing an "internet poll" to gauge the online popularity of Trump and Harris. Following this, we leveraged the presidential election as a case study for an event study to analyze its impact on the stock performance of the Magnificent Seven companies.

Additionally, we examined the earnings calls from the second and third quarters of the Magnificent Seven to assess their focus on AI, with particular attention to NVIDIA's AI developments and its relationship with China. For Project 2025, we first created a word cloud to extract key themes and insights. We then refined the analysis by focusing on two sets of keywords—security and policy, as well as law and national—to distill the core content of Project 2025. This helped us better understand Trump's potential policy directions and their implications.

Presidential election data

In[ ]:=
```
votes2020 = ResourceFunction["USElectionAtlasData"][2020, "President"];
votes2024 = ResourceFunction["USElectionAtlasData"][2024, "President"];
```

In[ ]:=
```
%42
```

Out[ ]=

State	Total	Biden	Trump	Other
Alabama, United States	2 323 282	849 624	1 441 170	32 488
Alaska, United States	359 530	153 778	189 951	15 801
Arizona, United States	3 397 388	1 672 143	1 661 686	63 559
Arkansas, United States	1 219 069	423 932	760 647	34 490
California, United States	17 531 845	11 110 639	6 006 518	414 688
Colorado, United States	3 256 980	1 804 352	1 364 607	88 021
Connecticut, United States	1 824 456	1 080 831	715 311	28 314
Delaware, United States	504 346	296 268	200 603	7475
District of Columbia, United States	344 356	317 323	18 586	8447
Florida, United States	11 092 221	5 297 045	5 668 731	126 445

rows 1–10 of **51**

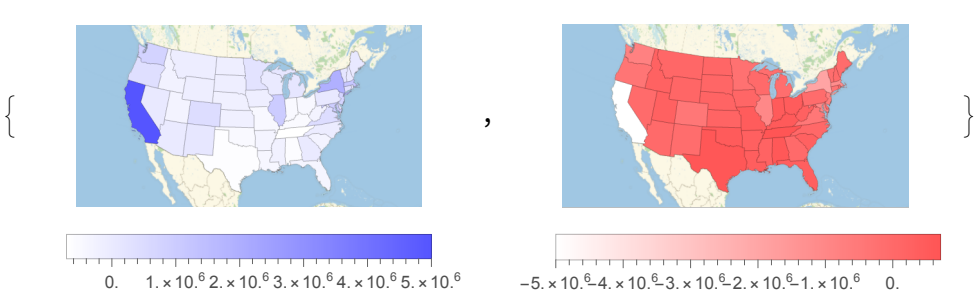
This section establishes the framework of the analysis using the USElectionAtlasData for the years 2020 and 2024.According to USElectionAtlasData, the distribution of votes in states in the 2020 and 2024 U.S. presidential elections shows clear partisan differences. Democratic candidates continue to maintain leads in states such as California and New York, long considered “blue states.” In “red states” such as Alabama and Texas, Republican candidates continue to lead. This situation reflects the long-term stability of American political trends in many states.

While the overall trend is stable, changes in voting gaps in key battleground states such as Georgia, Michigan and Pennsylvania are noteworthy. These states leaned slightly Democratic in 2020 and showed signs of leaning Republican in 2024. This shift may be influenced by several factors, including government policy, economic performance and social issues.

Heat Map

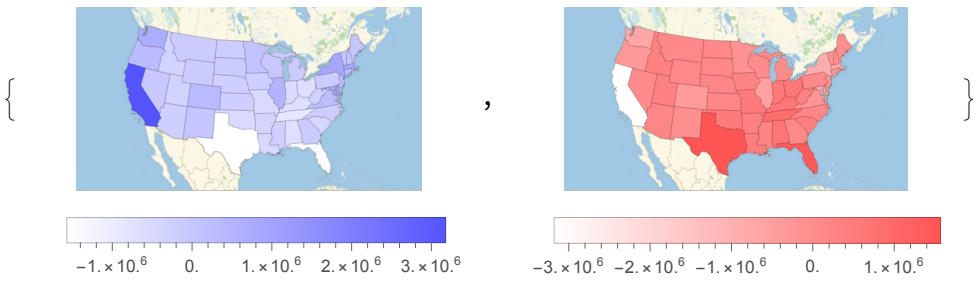
```
In[ ]:= {GeoRegionValuePlot[votes2020[All, N[#State → (#Biden - #Trump)] &],
   GeoRange → United States COUNTRY, GeoLabels → (Tooltip[#1, Row[{#2, ":", #4}]] &),
   PlotLegends → Placed[Automatic, Below],
   ColorFunction → (Blend[Lighter /@ {White, Blue}, #] &)],
  GeoRegionValuePlot[votes2020[All, N[#State → (#Trump - #Biden)] &],
   GeoRange → United States COUNTRY, GeoLabels → (Tooltip[#1, Row[{#2, ":", #4}]] &),
   PlotLegends → Placed[Automatic, Below],
   ColorFunction → (Blend[Lighter /@ {White, Red}, #] &)]}
```

Out[ ]=




```
In[ ]:= {GeoRegionValuePlot[votes2024[All, N[#State → (#Harris - #Trump)] &],
   GeoRange → United States COUNTRY, GeoLabels → (Tooltip[#1, Row[{#2, ":", #4}]] &),
   PlotLegends → Placed[Automatic, Below],
   ColorFunction → (Blend[Lighter /@ {White, Blue}, #] &)],
  GeoRegionValuePlot[votes2024[All, N[#State → (#Trump - #Harris)] &],
   GeoRange → United States COUNTRY, GeoLabels → (Tooltip[#1, Row[{#2, ":", #4}]] &),
   PlotLegends → Placed[Automatic, Below],
   ColorFunction → (Blend[Lighter /@ {White, Red}, #] &)]}
```

Out[ ]=



The heat map shows the vote gap in each state in the 2020 and 2024 US presidential elections through color gradients:Blue means the Democratic candidate is ahead. Red means the Republican candidate is ahead.The heat map can intuitively show the strength of the political tendencies of

each state, which helps to identify the geographical advantage areas of the red and blue parties.

2020 election heat map analysis. Northeast and West Coast democratic candidates continue to maintain their advantages in states such as California, New York, and Massachusetts, showing a strong blue tendency. Central and South republicans dominate in states such as Alabama, Texas, and Kansas, showing a deep red.

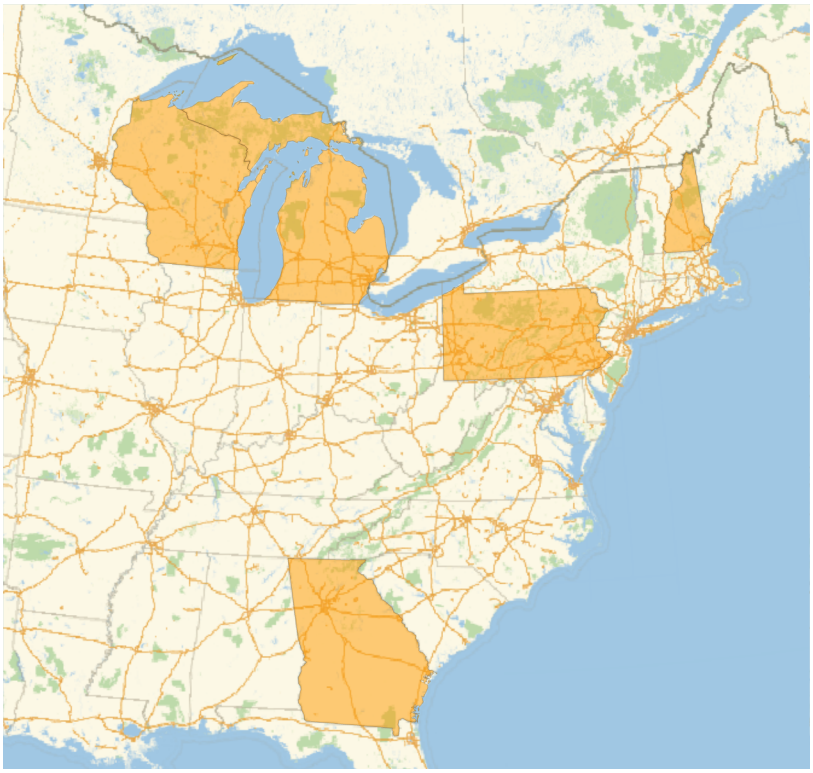
2024 election heat map changes. Arizona and Georgia the colors of these key swing states gradually transitioned from blue in 2020 to red, indicating that the Republican support rate has increased. Florida the red deepened, indicating that the Republican lead in the state has expanded.This change reflects that some voters' attitudes have shifted to the Republican Party, which may be affected by policies, economic performance and social issues.

Swing States

In[•]:=
```
swingStatesStats =
  Select[Normal@votes2024[All, N[#State → (#Harris - #Trump) / #Total] &],
   -0.03 < Values[#] < 0.03 &];
swingStates = swingStatesStats[[All, 1]];
swingStatesPerc = Round[#, 0.001] & /@ swingStatesStats[[All, 2]];
swingStatesAsso = AssociationThread[swingStates, swingStatesPerc]
GeoListPlot[swingStates, GeoLabels → (Tooltip[#1, #2] &)]
```

Out[•]=
```
⟨| Georgia, United States → -0.022,
 Michigan, United States → -0.014, New Hampshire, United States → 0.028,
 Pennsylvania, United States → -0.017, Wisconsin, United States → -0.009 |⟩
```

Out[ ]=



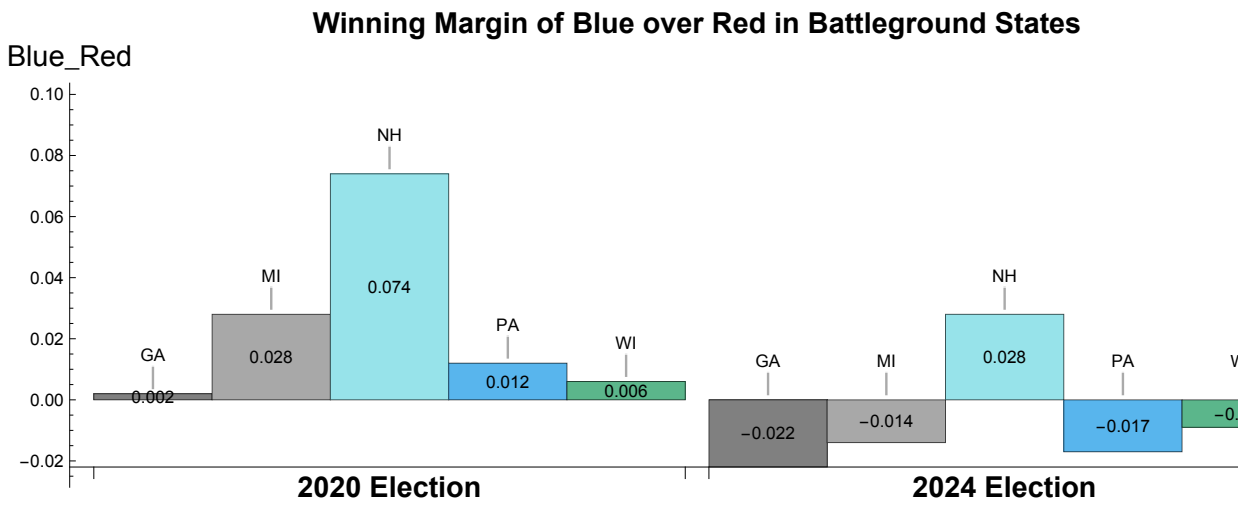
In[ ]:=
```
swingStatesCompare = Table[{Normal[(Select[votes2020, #State == i &])[
      All, N[#State → (#Biden - #Trump) / #Total] &]],
    Normal[(Select[votes2024, #State == i &])[All,
      N[#State → (#Harris - #Trump) / #Total] &]]}, {i, swingStates}]
```

Out[ ]=

$$\{\{\{\text{Georgia, United States} \to 0.00235582\}, \{\text{Georgia, United States} \to -0.0219234\}\},$$
$$\{\{\text{Michigan, United States} \to 0.0277945\}, \{\text{Michigan, United States} \to -0.014156\}\},$$
$$\{\{\text{New Hampshire, United States} \to 0.0735251\}, \{\text{New Hampshire, United States} \to 0.0277958\}\},$$
$$\{\{\text{Pennsylvania, United States} \to 0.0118387\}, \{\text{Pennsylvania, United States} \to -0.0173336\}\},$$
$$\{\{\text{Wisconsin, United States} \to 0.006271\}, \{\text{Wisconsin, United States} \to -0.00904905\}\}\}$$

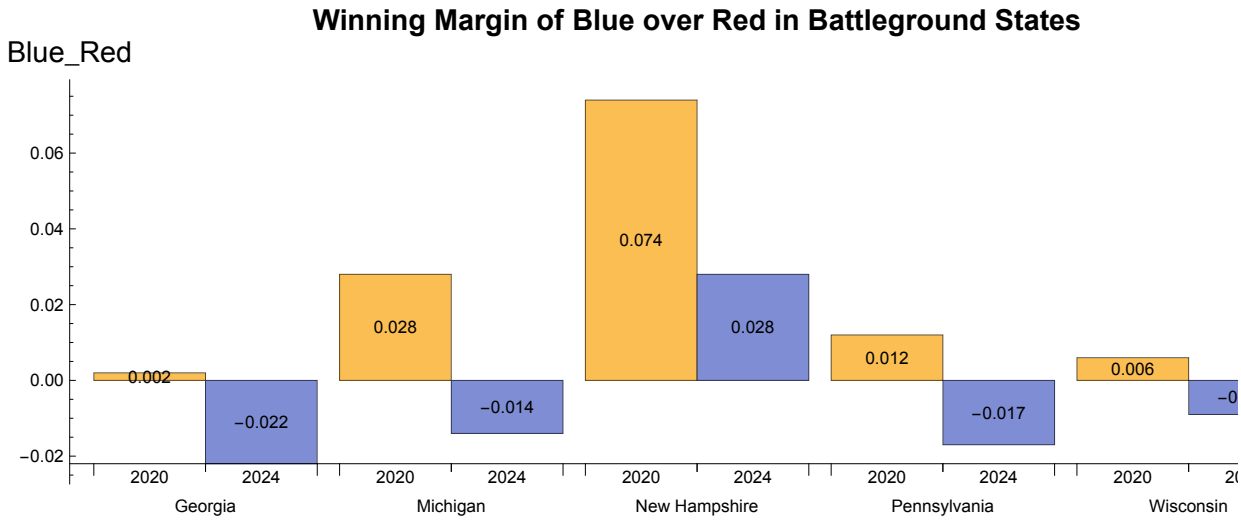
In[ ]:=
```
asso2020 = Association@Flatten@swingStatesCompare[[All, 1]];
asso2024 = Association@Flatten@swingStatesCompare[[All, 2]];
BarChart[
 Transpose[
  {Labeled[Round[#, 0.001] & /@ Values@asso2020, Style["2020 Election", Bold, 15]],
   Labeled[Round[#, 0.001] & /@ Values@asso2024,
    Style["2024 Election", Bold, 15]]}],
 ScalingFunctions → None,
 LabelingFunction → Center,
 ChartLabels →
  Callout[Table[i["StateAbbreviation"], {i, Keys[asso2024]}], Above],
 AxesLabel → {Style["State", 15], Style["Blue_Red", 15]},
 PlotLabel →
  Style["Winning Margin of Blue over Red in Battleground States", Bold, 15],
 BarSpacing → None,
 BarOrigin → Bottom,
 ImageSize → 720,
 AspectRatio → 0.5 / GoldenRatio,
 Background → White,
 ChartStyle → 47
]
```

Out[ ]=



In[ ]:=
```
asso2020 = Association@Flatten@swingStatesCompare[[All, 1]];
asso2024 = Association@Flatten@swingStatesCompare[[All, 2]];
BarChart[Transpose[{Round[#, 0.001] & /@ Values@asso2020,
   Round[#, 0.001] & /@ Values@asso2024}], ScalingFunctions → None,
 LabelingFunction → Center,
 AxesLabel → {Style["State", 15], Style["Blue_Red", 15]},
 PlotLabel →
  Style["Winning Margin of Blue over Red in Battleground States", Bold, 15],
 ChartLabels → {Table[StringSplit[i["Name"], ", United States"][[1]],
    {i, Keys[asso2024]}], {"2020", "2024"}},
 BarSpacing → None,
 BarOrigin → Bottom,
 ImageSize → 720,
 AspectRatio → 0.5 / GoldenRatio,
 Background → White]
```

Out[ ]=



Swing states such as Georgia, Michigan, New Hampshire, Pennsylvania, and Wisconsin play a decisive role in determining the outcome of U.S. presidential elections due to their narrow voting margins. These states can shift their political support between the Democratic (blue) and Republican (red) parties, making them pivotal battlegrounds.

2020 vs. 2024 Changes

In 2020, these swing states leaned slightly Democratic. However, by 2024, the voting trends in these states have shifted towards the Republican Party. For example,Georgia-2020: Slight Democratic lead +0.24% or 0.002).2024: Shifted to a Republican lead (-2.2% or -0.022).This swing highlights the dynamic nature of voter sentiment and the potential impact of factors such as government performance, economic policies, and social issues.

Broader Implications, Michigan and Pennsylvania: These states also exhibit similar shifts, reflecting a broader trend of dissatisfaction or changing priorities among voters. New Hampshire and

Wisconsin: Historically close contests in these states further underscore the critical importance of swing state dynamics.

Economic Conditions: Changes in employment rates, inflation, and economic policies may influence voter attitudes.Policy Impact: Key policies on healthcare, education, and infrastructure can sway voter loyalty.Public Sentiment: Response to the current administration's performance, handling of crises, and cultural issues can drive changes in swing state outcomes.

Google Search（Election polls）

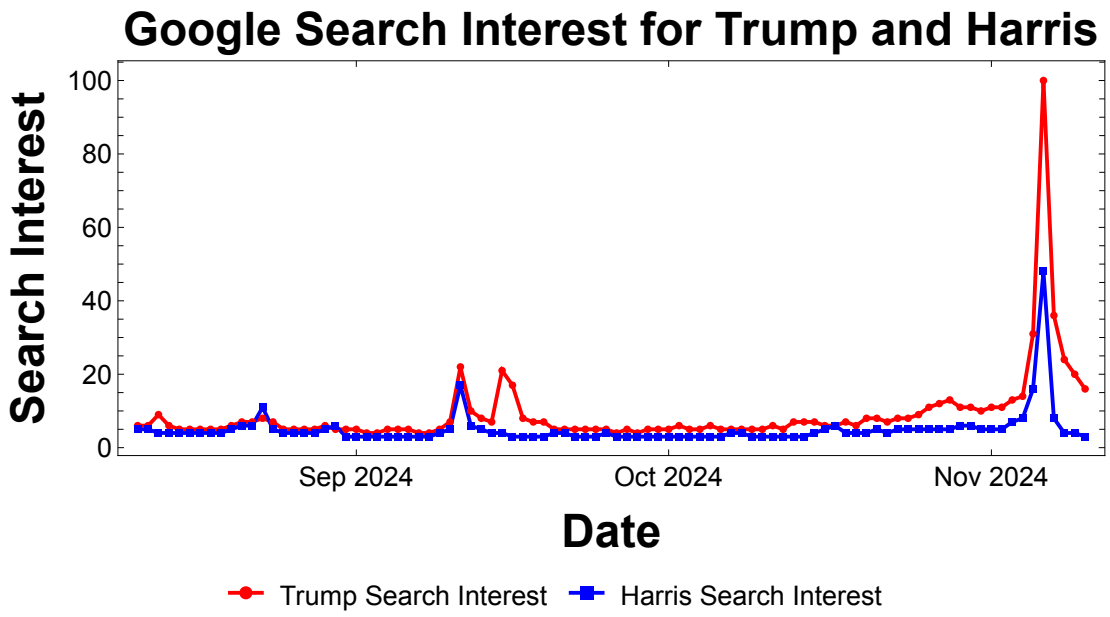
In[•]:=
```
timelineFilePath =
  "/Users/iveshe/Library/Mobile Documents/com~apple~CloudDocs/Term
    1/BDI 513/Group Project/New/multiTimeline_cleaned.csv";
geoMapFilePath =
  "/Users/iveshe/Library/Mobile Documents/com~apple~CloudDocs/Term 1/BDI
    513/Group Project/New/geoMap_cleaned.csv";

dataTimeline = Import[timelineFilePath, "Data"];
dataGeoMap = Import[geoMapFilePath, "Data"];

dataTimelineHead = Take[dataTimeline, 5]
dataGeoMapHead = Take[dataGeoMap, 5]

varDate =
  DateObject[{#, {"Year", "-", "Month", "-", "Day"}}] & /@ dataTimeline[[2 ;;, 1]];
varSearchTrump = ToExpression /@ dataTimeline[[2 ;;, 2]];
varSearchHarris = ToExpression /@ dataTimeline[[2 ;;, 3]];

varRegion = dataGeoMap[[2 ;;, 1]];
varTrumpPercentage = ToExpression /@ dataGeoMap[[2 ;;, 2]];
varHarrisPercentage = ToExpression /@ dataGeoMap[[2 ;;, 3]];
```

Out[•]=
```
{{Date, Trump_Search, Harris_Search}, {2024-08-11, 6, 5},
 {2024-08-12, 6, 5}, {2024-08-13, 9, 4}, {2024-08-14, 6, 4}}
```

Out[•]=
```
{{Region, Trump_Search_Percentage, Harris_Search_Percentage},
 {Pennsylvania, 65, 35}, {Wisconsin, 64, 36}, {Maine, 66, 34}, {Vermont, 65, 35}}
```

In[ ]:=
```
dataPairTrump = Transpose[{varDate, varSearchTrump}];
dataPairHarris = Transpose[{varDate, varSearchHarris}];

DateListPlot[{dataPairTrump, dataPairHarris},
 PlotStyle → {Directive[Red, Thick], Directive[Blue, Thick]},
 PlotMarkers → {Automatic, 7},
 PlotLegends → Placed[{"Trump Search Interest", "Harris Search Interest"}, Below],
 AxesLabel → {Style["Date", Medium], Style["Search Interest", Medium]},
 PlotRange → All, AspectRatio → 0.4, ImageSize → Large, Frame → True,
 FrameLabel → {Style["Date", Bold, Large], Style["Search Interest", Bold, Large]},
 PlotLabel → Style["Google Search Interest for Trump and Harris", Bold, Large],
 LabelStyle → {FontSize → 14}, TicksStyle → Directive[Black, Medium]]
```

Out[ ]=



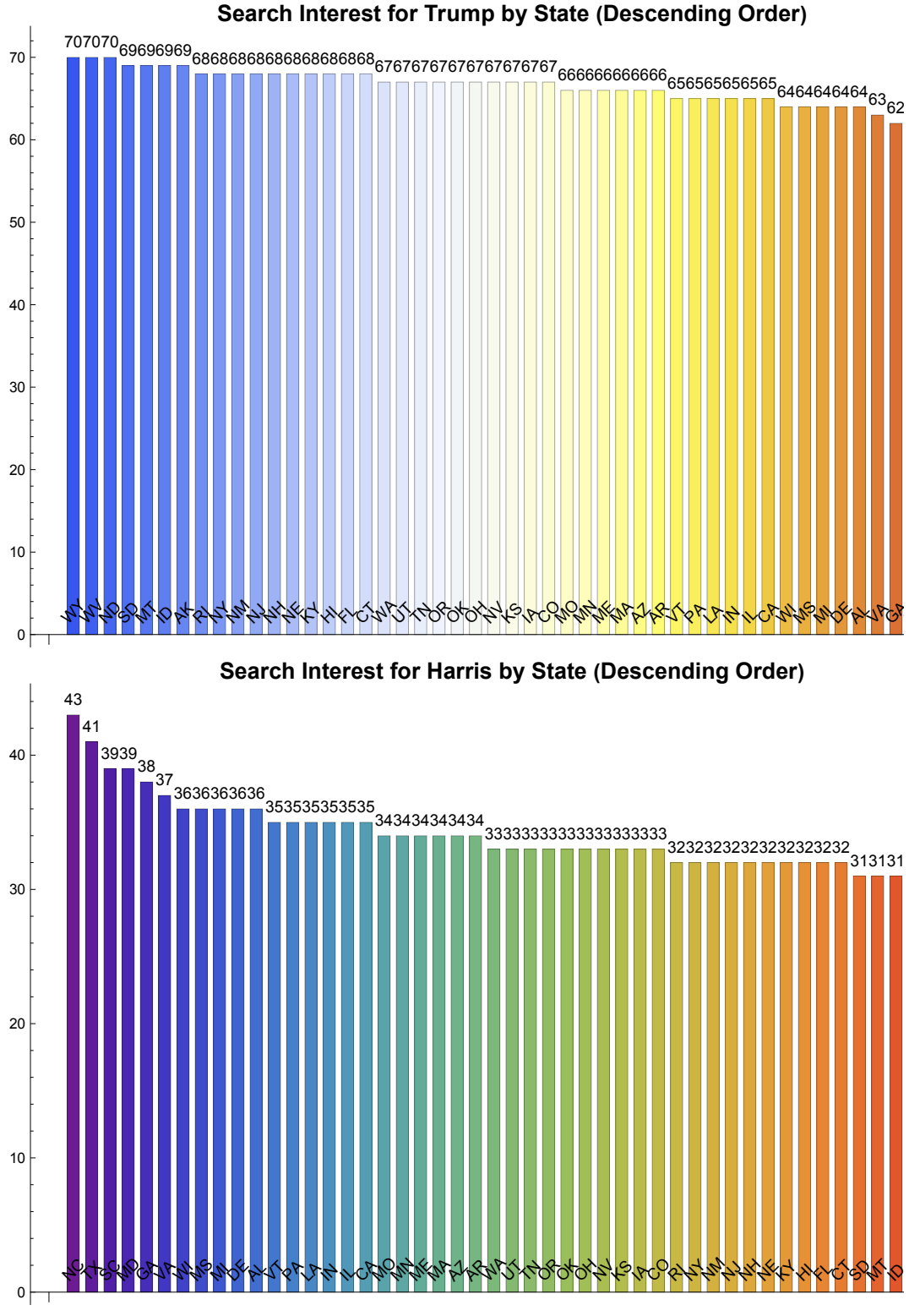
In[ ]:=
```
correlation = Correlation[varSearchTrump, varSearchHarris];
N[correlation]
```

Out[ ]=
```
0.908209
```

In[ ]:=
```
data =
  Import["/Users/iveshe/Library/Mobile Documents/com~apple~CloudDocs/Term 1/BDI
     513/Group Project/New/geoMap_cleaned.csv"];

stateAbbreviations = <|"Alabama" → "AL", "Alaska" → "AK", "Arizona" → "AZ",
   "Arkansas" → "AR", "California" → "CA", "Colorado" → "CO", "Connecticut" → "CT",
   "Delaware" → "DE", "Florida" → "FL", "Georgia" → "GA", "Hawaii" → "HI",
   "Idaho" → "ID", "Illinois" → "IL", "Indiana" → "IN", "Iowa" → "IA",
   "Kansas" → "KS", "Kentucky" → "KY", "Louisiana" → "LA", "Maine" → "ME",
```

```
    "Maryland" → "MD", "Massachusetts" → "MA", "Michigan" → "MI",
    "Minnesota" → "MN", "Mississippi" → "MS", "Missouri" → "MO", "Montana" → "MT",
    "Nebraska" → "NE", "Nevada" → "NV", "New Hampshire" → "NH", "New Jersey" → "NJ",
    "New Mexico" → "NM", "New York" → "NY", "North Carolina" → "NC",
    "North Dakota" → "ND", "Ohio" → "OH", "Oklahoma" → "OK", "Oregon" → "OR",
    "Pennsylvania" → "PA", "Rhode Island" → "RI", "South Carolina" → "SC",
    "South Dakota" → "SD", "Tennessee" → "TN", "Texas" → "TX",
    "Utah" → "UT", "Vermont" → "VT", "Virginia" → "VA", "Washington" → "WA",
    "West Virginia" → "WV", "Wisconsin" → "WI", "Wyoming" → "WY"|>;

regions = stateAbbreviations /@ data[[All, 1]];
trumpSearch = data[[All, 2]];
harrisSearch = data[[All, 3]];

sortedTrumpData = Reverse[SortBy[Transpose[{regions, trumpSearch}], Last]];
sortedHarrisData = Reverse[SortBy[Transpose[{regions, harrisSearch}], Last]];

sortedRegionsTrump = sortedTrumpData[[All, 1]];
sortedValuesTrump = sortedTrumpData[[All, 2]];

sortedRegionsHarris = sortedHarrisData[[All, 1]];
sortedValuesHarris = sortedHarrisData[[All, 2]];

trumpBarChart = BarChart[sortedValuesTrump, ChartLabels →
     Placed[Rotate[Style[#, 10], 45 Degree] & /@ sortedRegionsTrump, Bottom],
    PlotLabel → Style["Search Interest for Trump by State (Descending Order)",
      Bold, 14], ChartStyle → "TemperatureMap",
    LabelingFunction → (Placed[Style[#, 10, Black], Above] &),
    BarSpacing → 0.5, ImageSize → {800, 400}];

harrisBarChart = BarChart[sortedValuesHarris, ChartLabels →
     Placed[Rotate[Style[#, 10], 45 Degree] & /@ sortedRegionsHarris, Bottom],
    PlotLabel → Style["Search Interest for Harris by State (Descending Order)",
      Bold, 14], ChartStyle → "Rainbow",
    LabelingFunction → (Placed[Style[#, 10, Black], Above] &),
    BarSpacing → 0.5, ImageSize → {800, 400}];

Column[{trumpBarChart, harrisBarChart}]
```

Out[ ]=



The Google search data demonstrates that Trump consistently has higher search interest compared to Harris, both overall and within every state. The first chart indicates a significantly higher peak for Trump in search interest, particularly near major events or announcements, while Harris's

search interest remains relatively lower and stable. The correlation coefficient of 0.908209 between their search interests suggests a strong positive relationship, indicating that spikes in search interest for one often coincide with spikes for the other, likely driven by shared political or news events. Furthermore, the state-by-state analysis reinforces Trump's dominant popularity across all regions, with his search interest scores surpassing Harris's in every state.

Event Study

In[•]:=
```
tickerSelect={"NASDAQ:GOOG","NASDAQ:AMZN","NASDAQ:AAPL",
   "NASDAQ:META","NASDAQ:MSFT","NASDAQ:NVDA","NASDAQ:TSLA"};
stockSelect = Table[Interpreter["Financial"][i], {i, tickerSelect}];
companySelect = Table[i["Company"], {i, stockSelect}];
logoSelect=Table[i["Image"],{i,companySelect}];

myHelperGetText[url_] := (Import[url];
  textCleanByPage = Table[
    StringDrop[i, StringPosition[i, "spglobal.com/marketintelligence"][[1, 2]]],
    {i, Import[url, "PagePlaintext"][[4 ;;]]}];
  startPresentation =
   Position[StringContainsQ[textCleanByPage, "Presentation"], True][[1, 1]];
  startQA =
   Position[StringContainsQ[textCleanByPage, "Question and Answer"], True][[1, 1]];
  endTranscript = Length[textCleanByPage];
  textPresentation =
   StringRiffle[textCleanByPage[[startPresentation ;; (startQA - 1)]]];
  sentencesPresentation =
   TextSentences[StringRiffle[StringTrim[StringSplit[textPresentation, "\n"]]]];
  textQA = StringRiffle[textCleanByPage[[startQA ;;]]];
  sentencesQA =
   TextSentences[StringRiffle[StringTrim[StringSplit[textQA, "\n"]]]];
  textAll = StringRiffle[textCleanByPage[[startPresentation ;;]]];
  sentencesAll =
   TextSentences[StringRiffle[StringTrim[StringSplit[textAll, "\n"]]]];
  sentencesAll)

myHelperFunctionKeyWords[text_] :=
 (
  allSentences = sentencesAll;
  keyWordsTest[w_] := StringContainsQ[w, {"AI"}];
  Select[allSentences, keyWordsTest];
  Length[Select[allSentences, keyWordsTest]]
 )
```

In[ ]:=
```
{"NASDAQ:GOOG", "NASDAQ:AMZN", "NASDAQ:AAPL",
 "NASDAQ:META", "NASDAQ:MSFT", "NASDAQ:NVDA", "NASDAQ:TSLA"}
```

Out[ ]=
```
{NASDAQ:GOOG, NASDAQ:AMZN, NASDAQ:AAPL,
 NASDAQ:META, NASDAQ:MSFT, NASDAQ:NVDA, NASDAQ:TSLA}
```

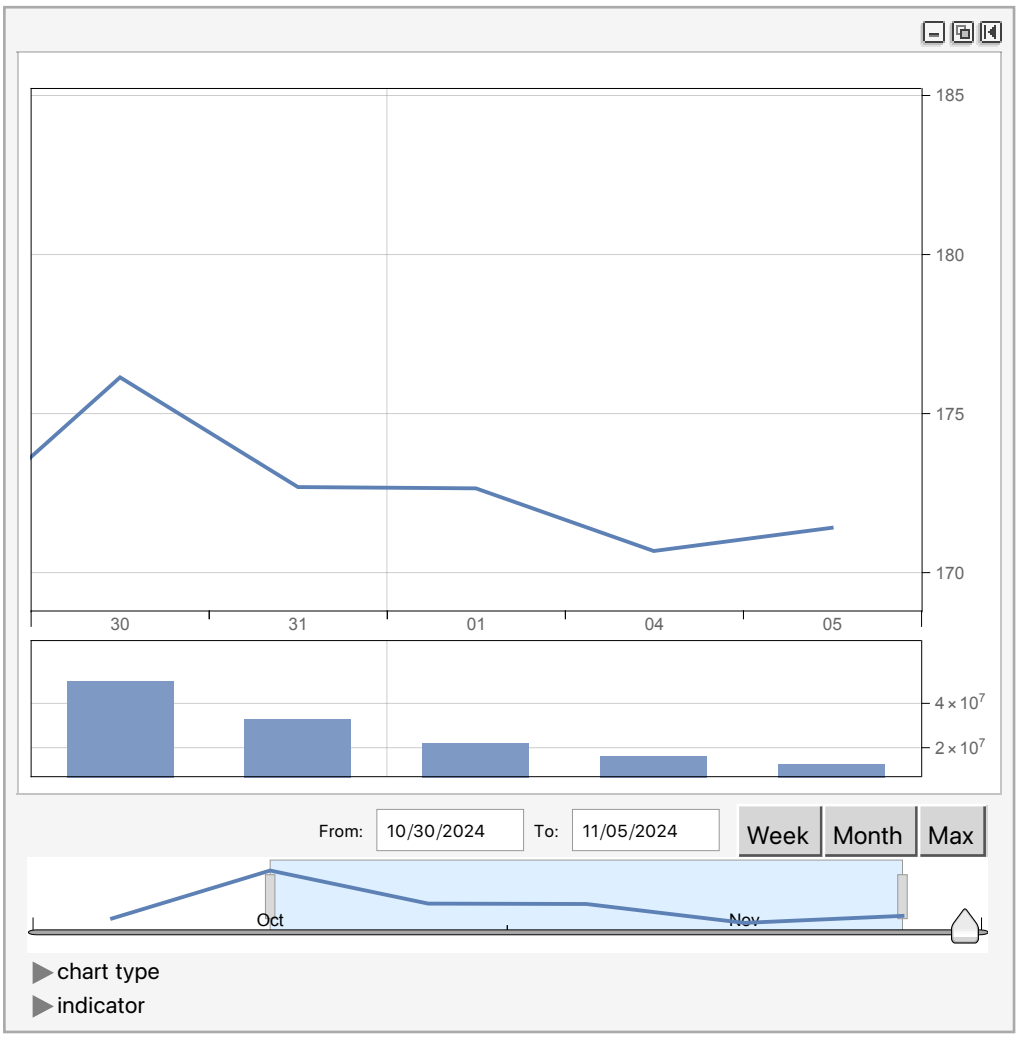
In[ ]:=
```
date = DateObject["11/05/2024", "Day"]
helperYesterday[x_] := PreviousDate[x, "Day"]
helperTomorrow[x_] := NextDate[x, "Day"]
Table[{"pre event", Interpreter["Financial"][i], InteractiveTradingChart[
   FinancialData[i, "OHLCV", {Nest[helperYesterday, date, 7], date}],
   Appearance → "Line"]}, {i, tickerSelect}]
Table[{"post event", Interpreter["Financial"][i], InteractiveTradingChart[
   FinancialData[i, "OHLCV", {date, Nest[helperTomorrow, date, 7]}],
   Appearance → "Line"]}, {i, tickerSelect}]
```

Out[ ]=

Tue 5 Nov 2024

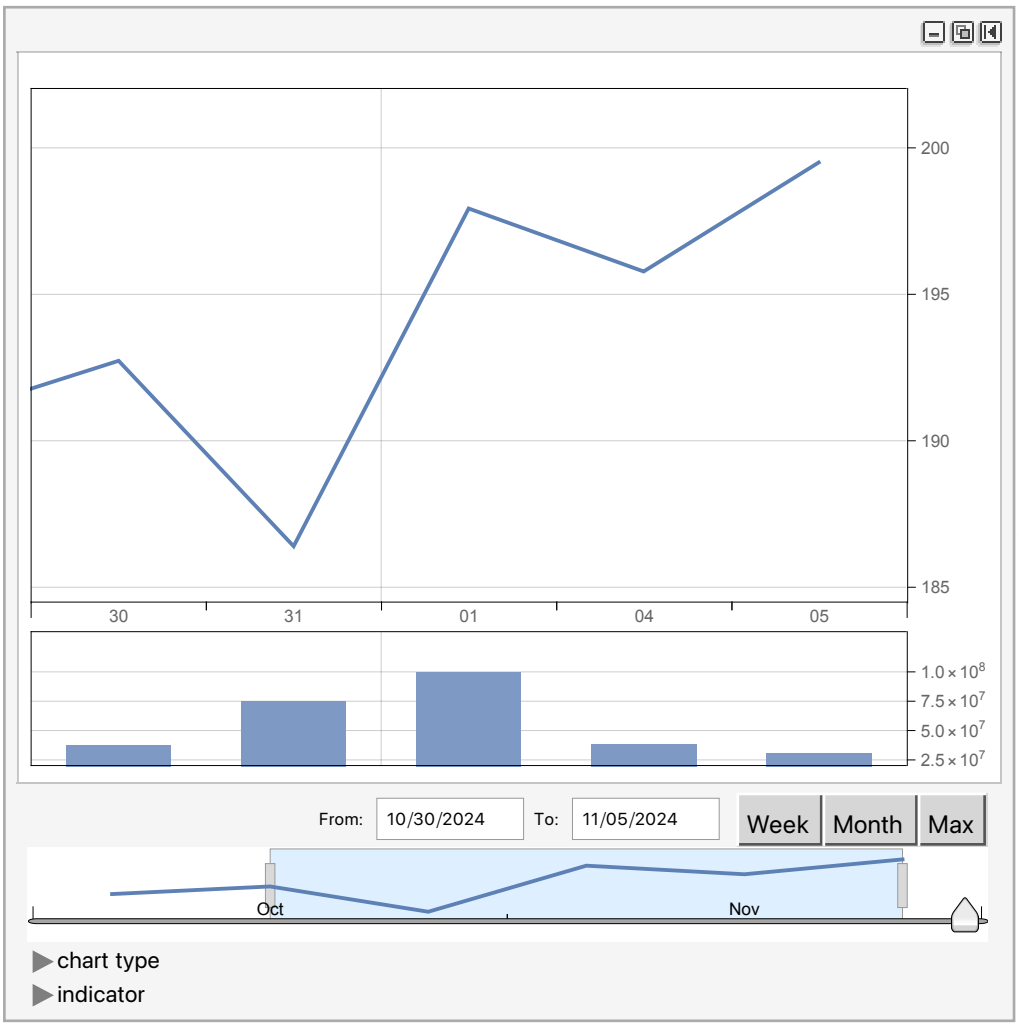
Out[ ]=

{{pre event, Alphabet Class C Shares ,



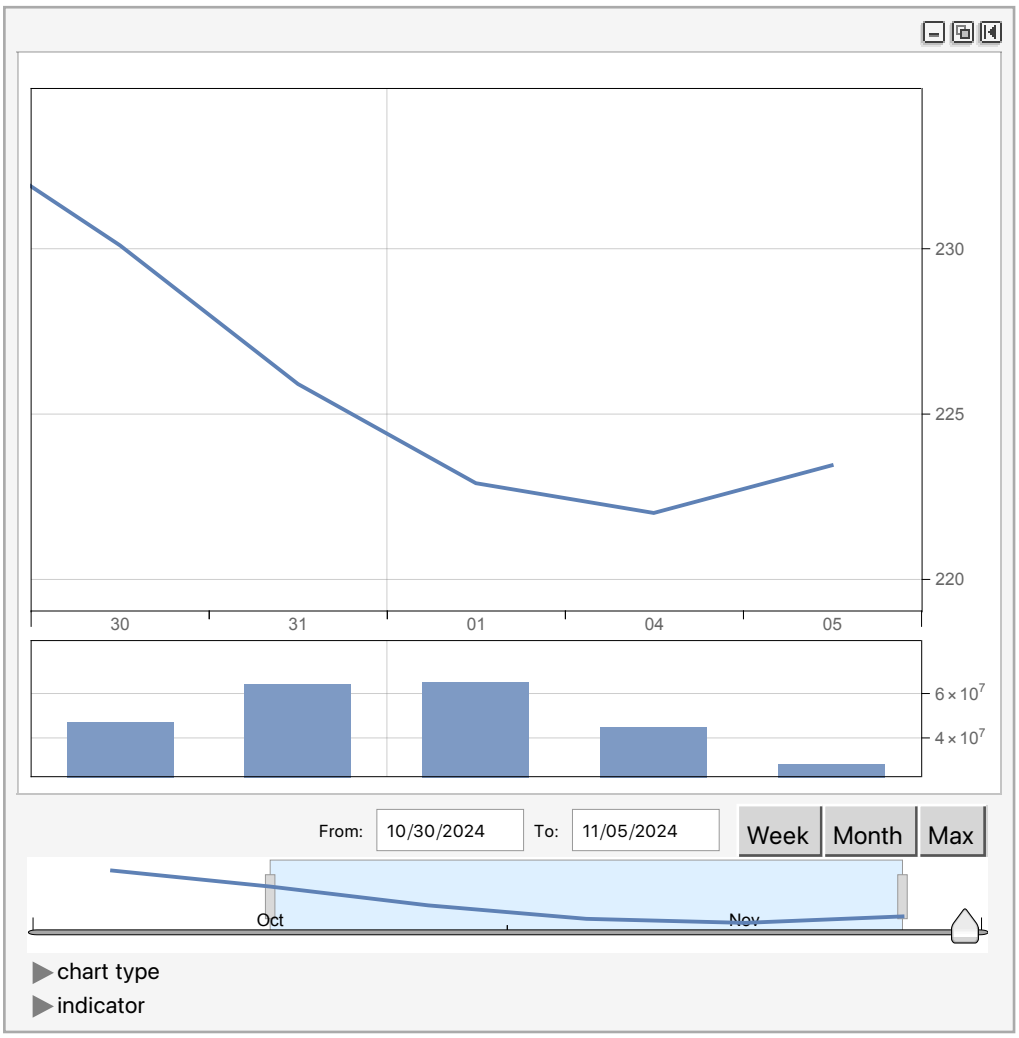
},

{pre event, Amazon,



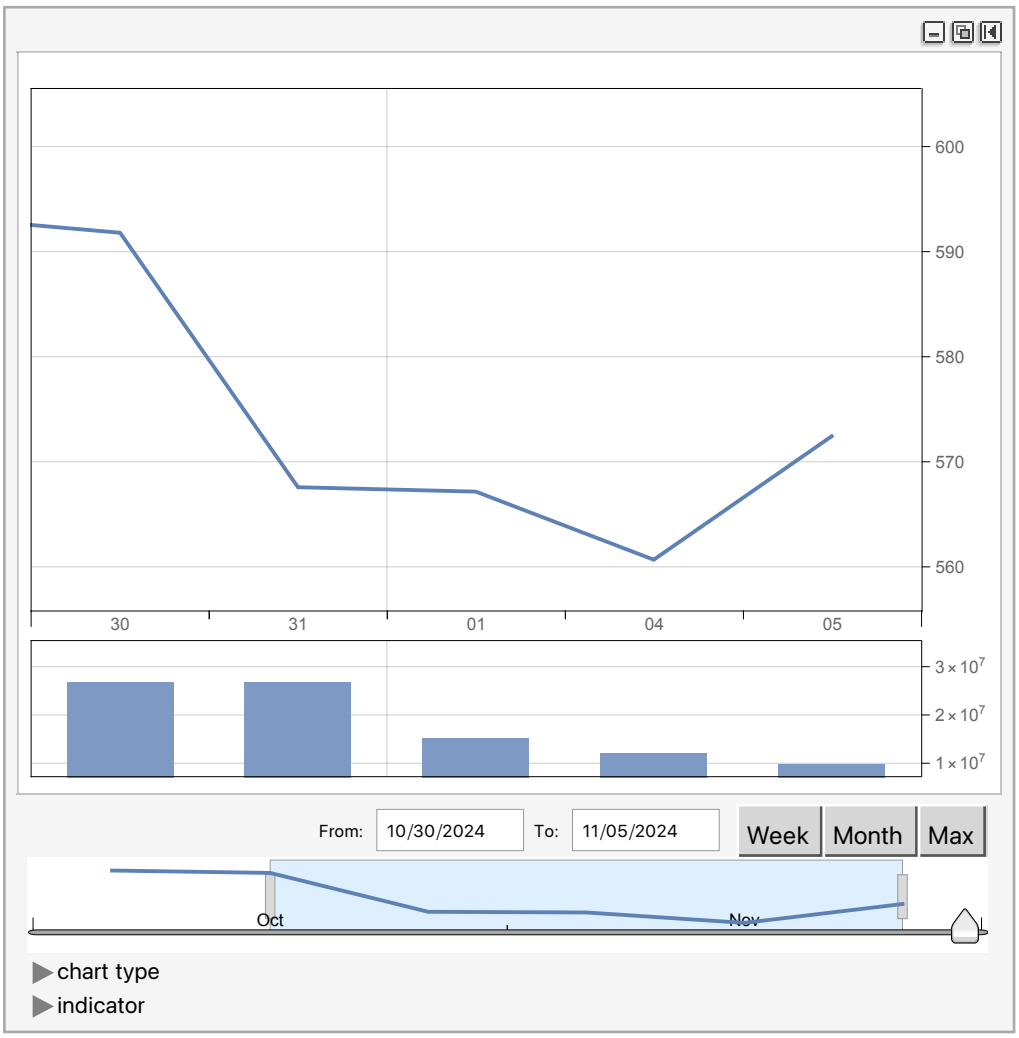
},

{pre event, Apple},



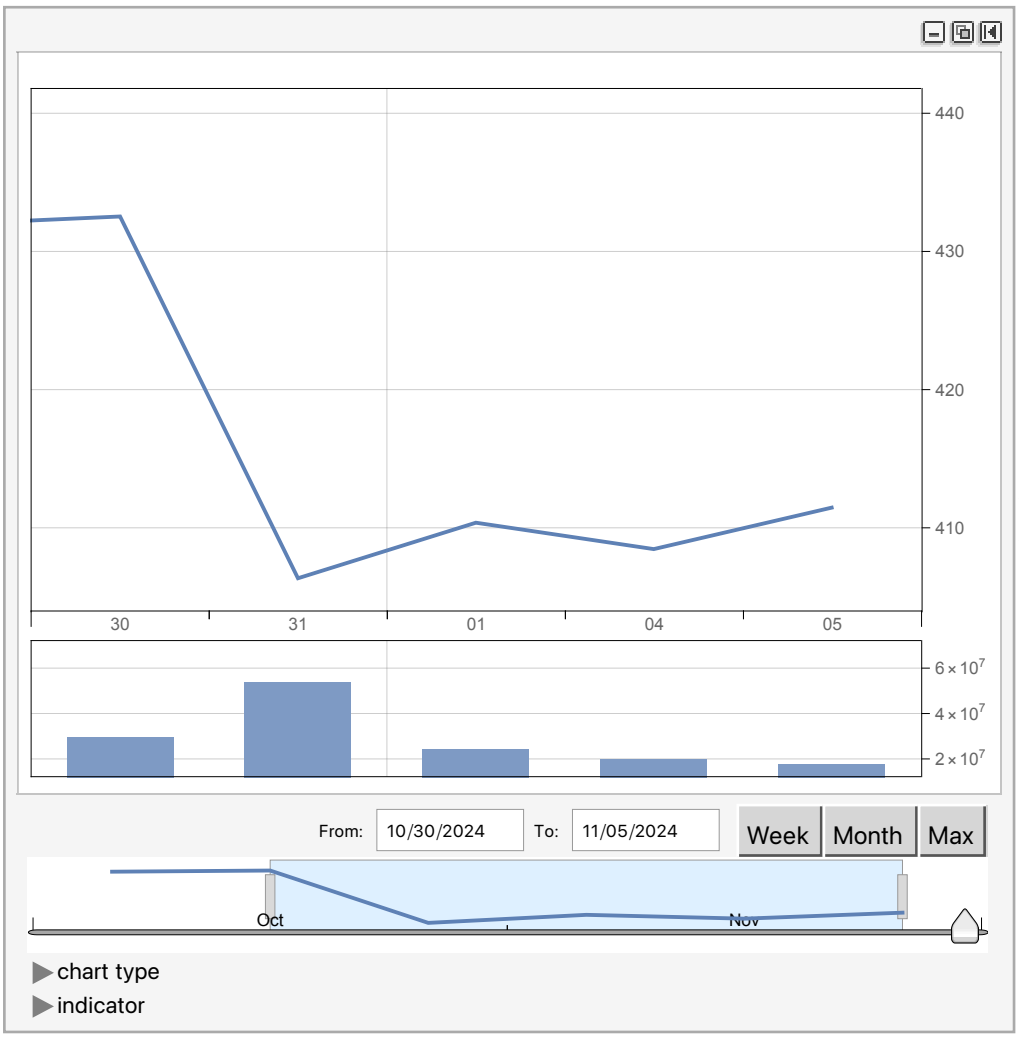
},

{pre event, Meta,



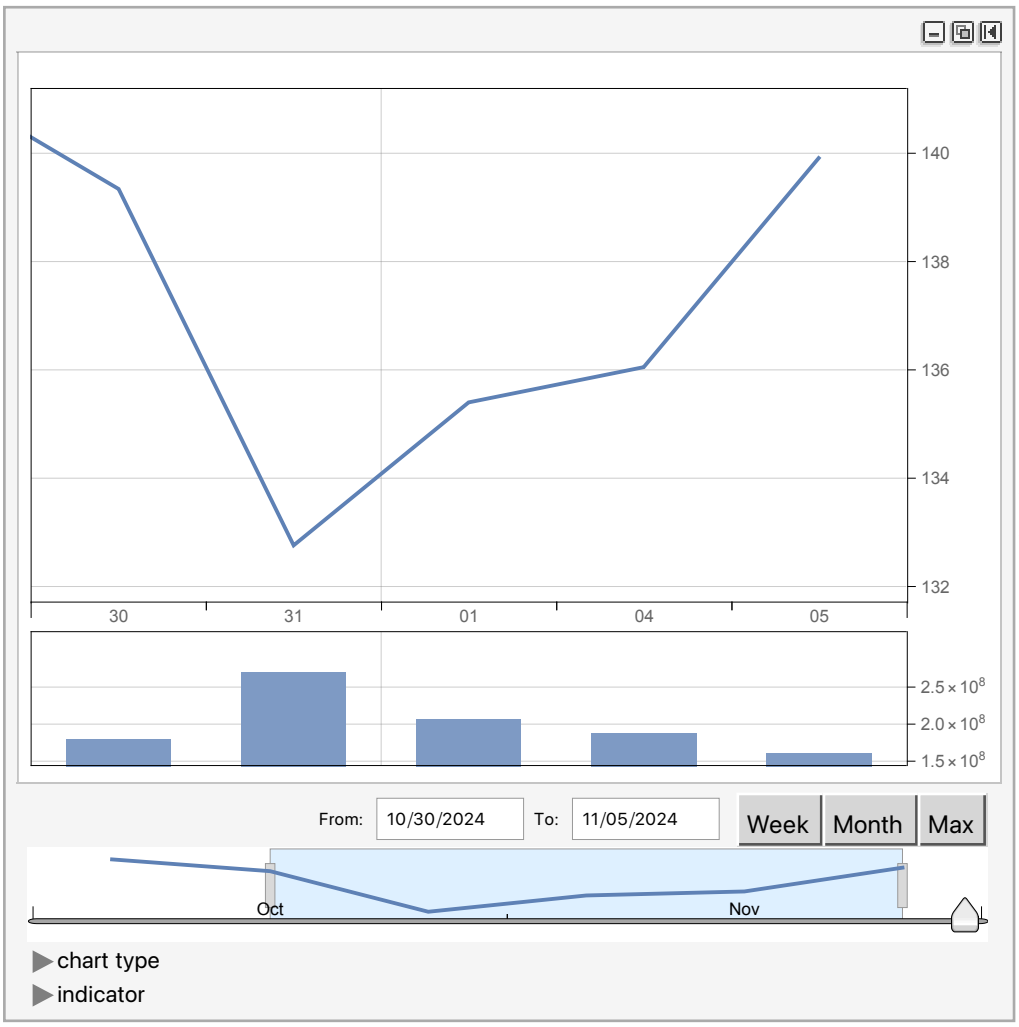
},

{pre event, Microsoft ,



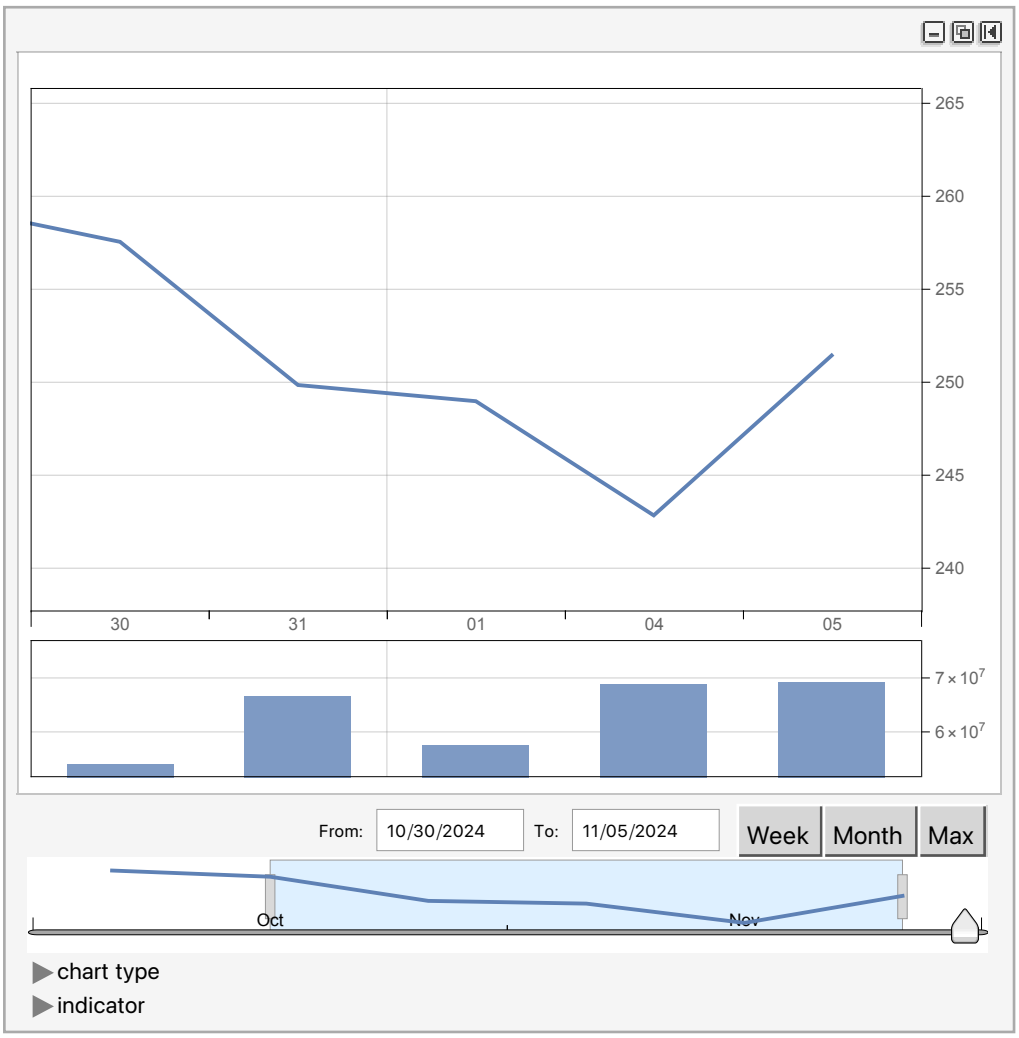
},

{pre event, NVIDIA,



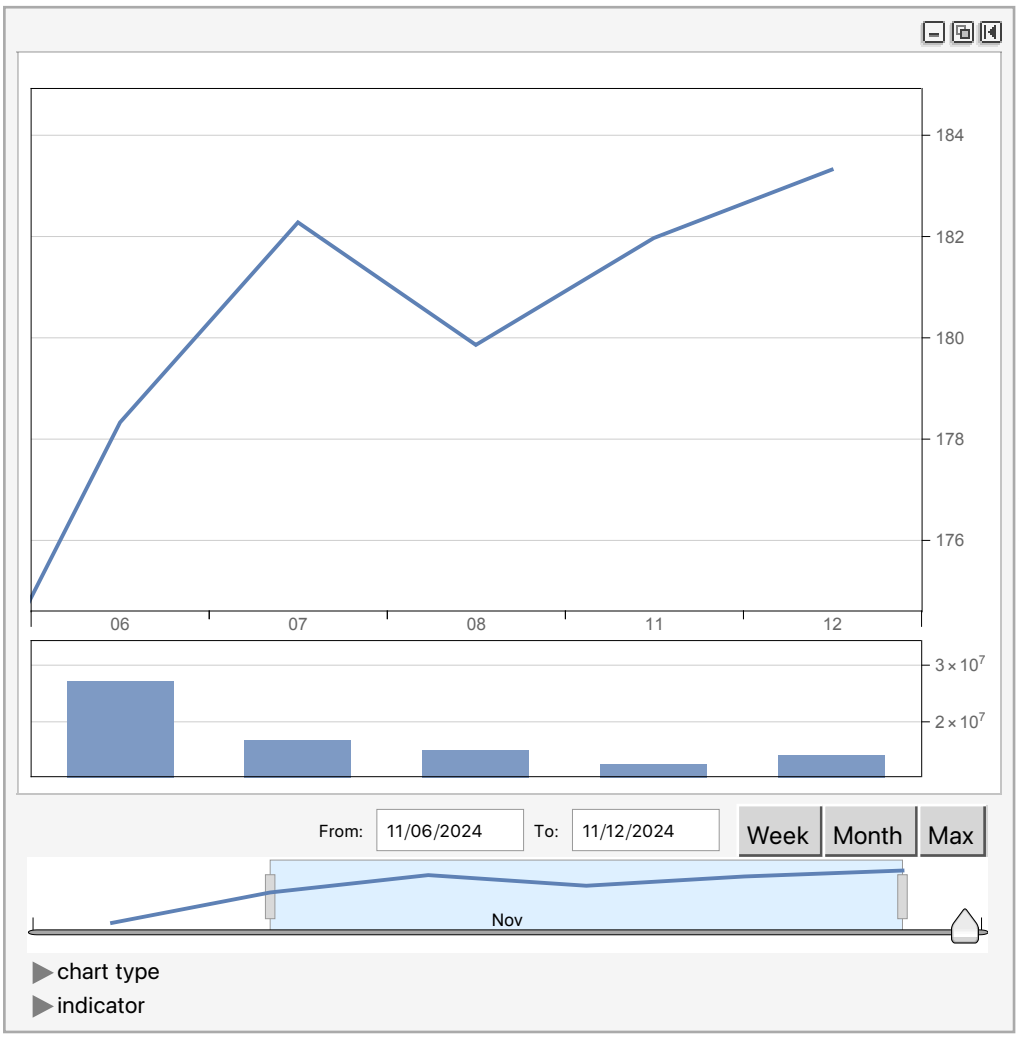
},

{pre event, Tesla Motors ,



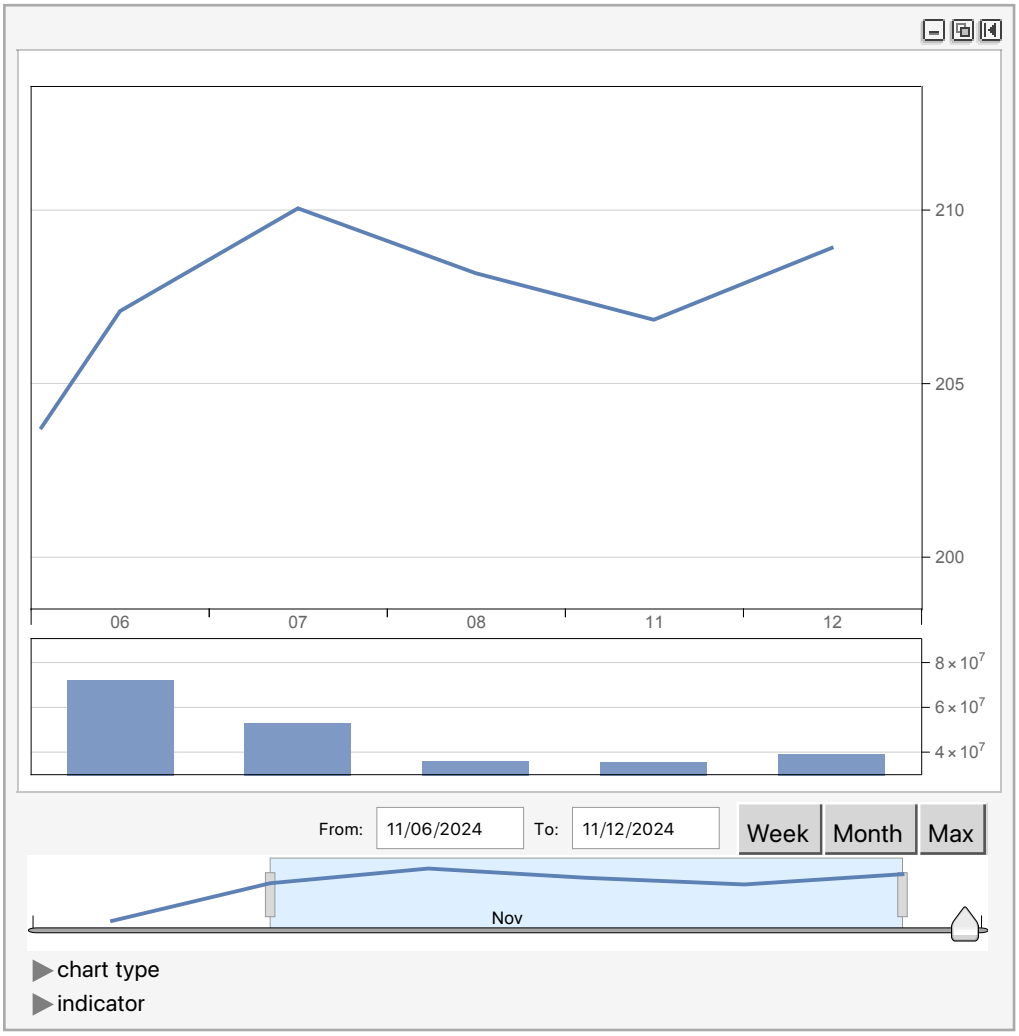
Out[ ]=

{{post event, Alphabet Class C Shares},



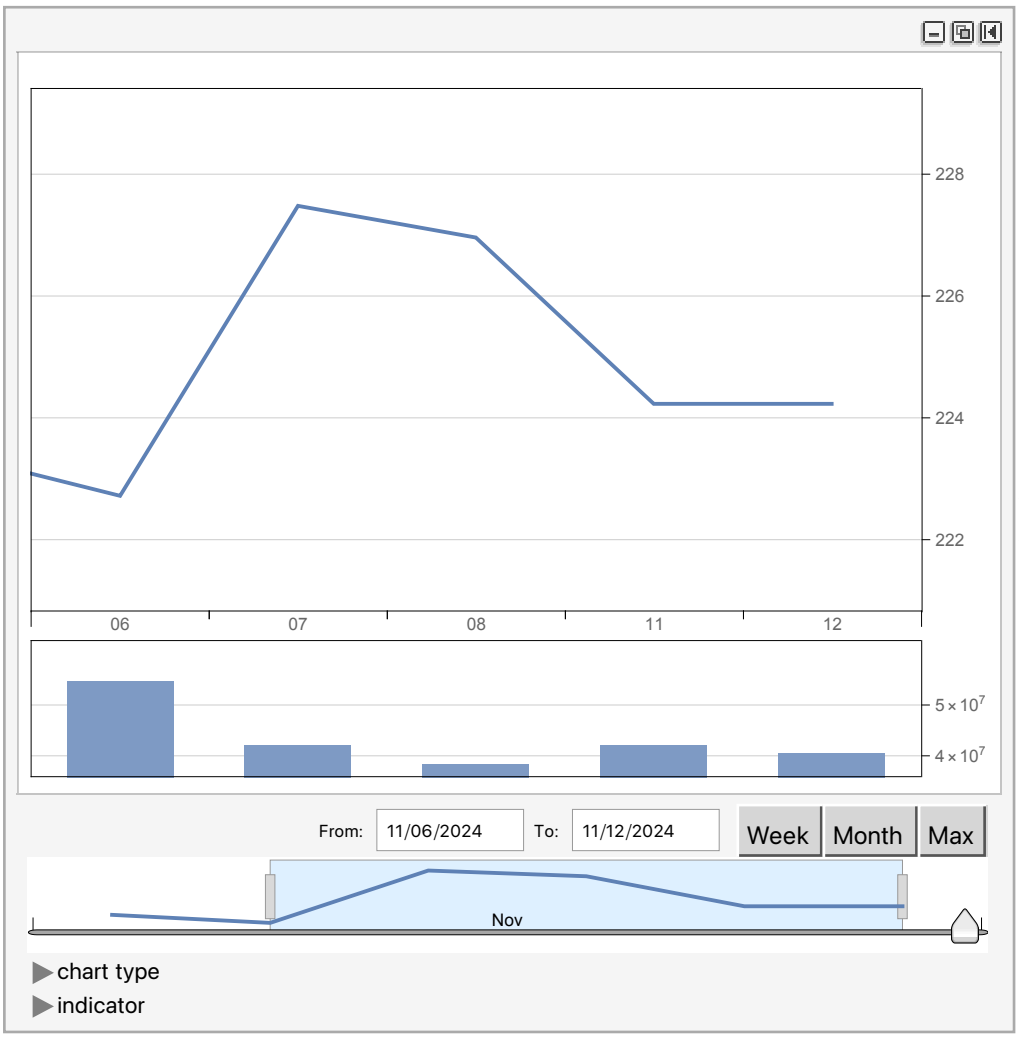
},

{post event, Amazon ,



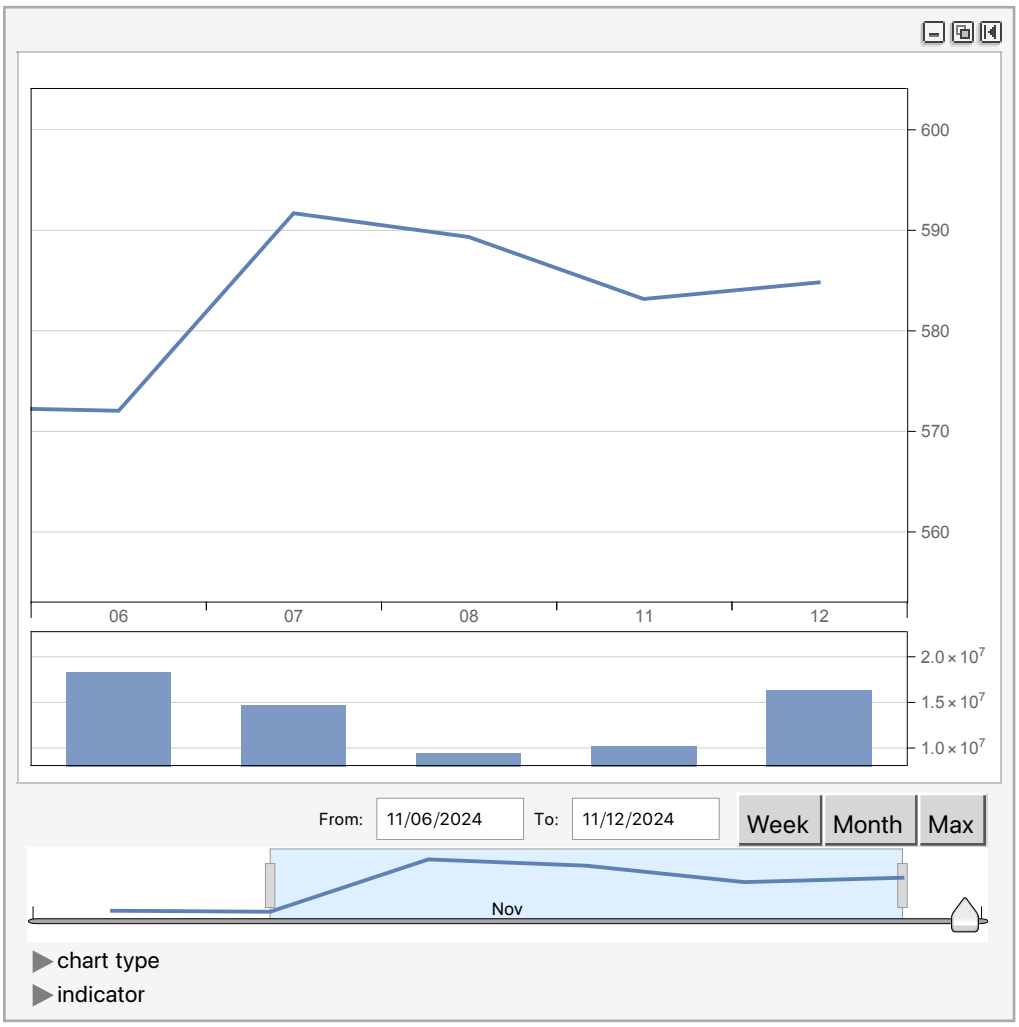
},

{post event, Apple},



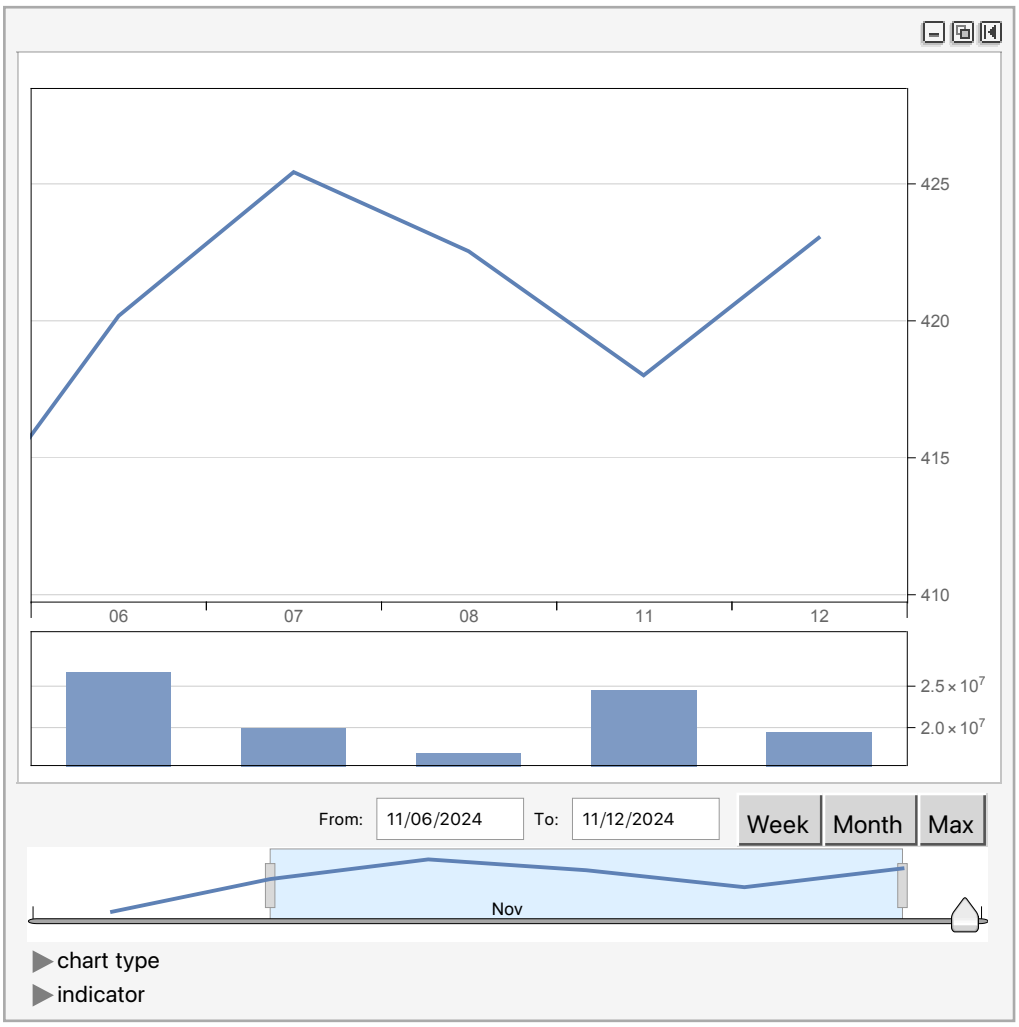
},

{post event, Meta,



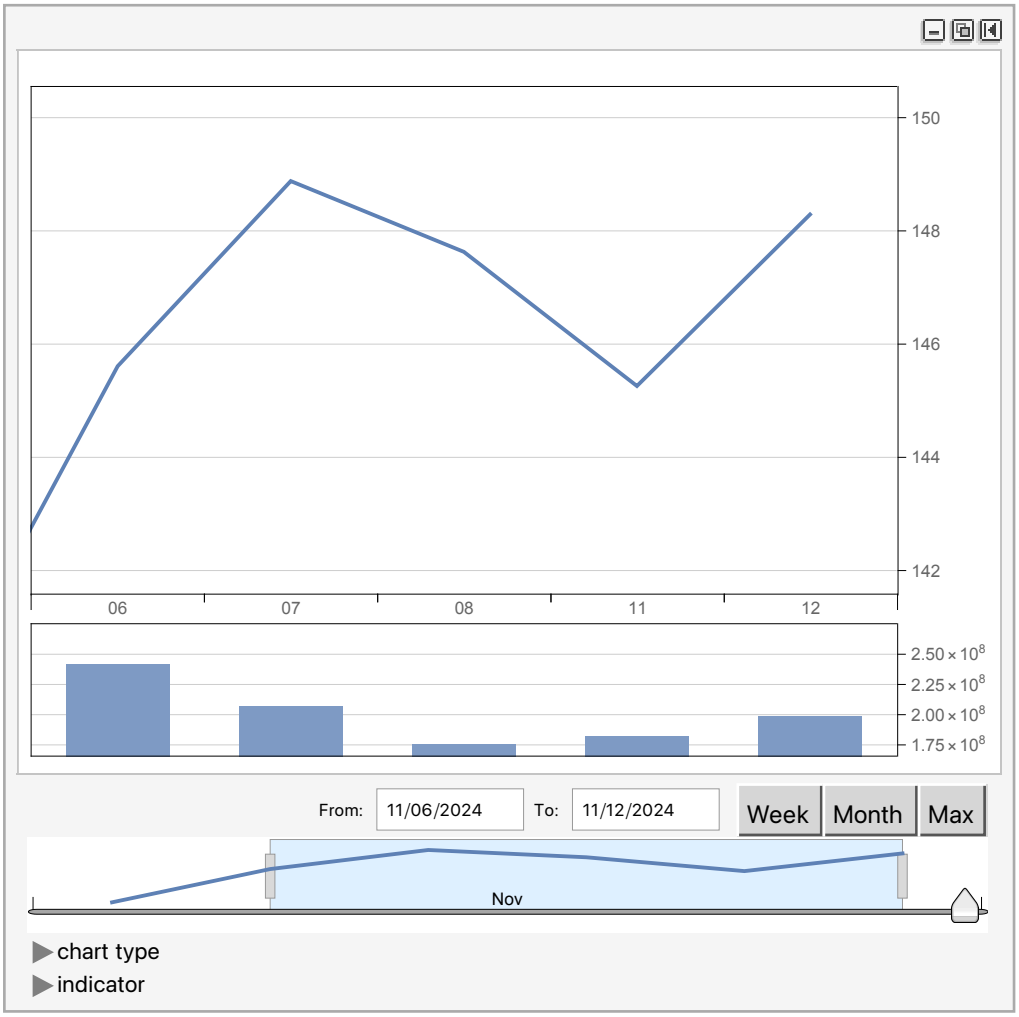
},

{post event, Microsoft},



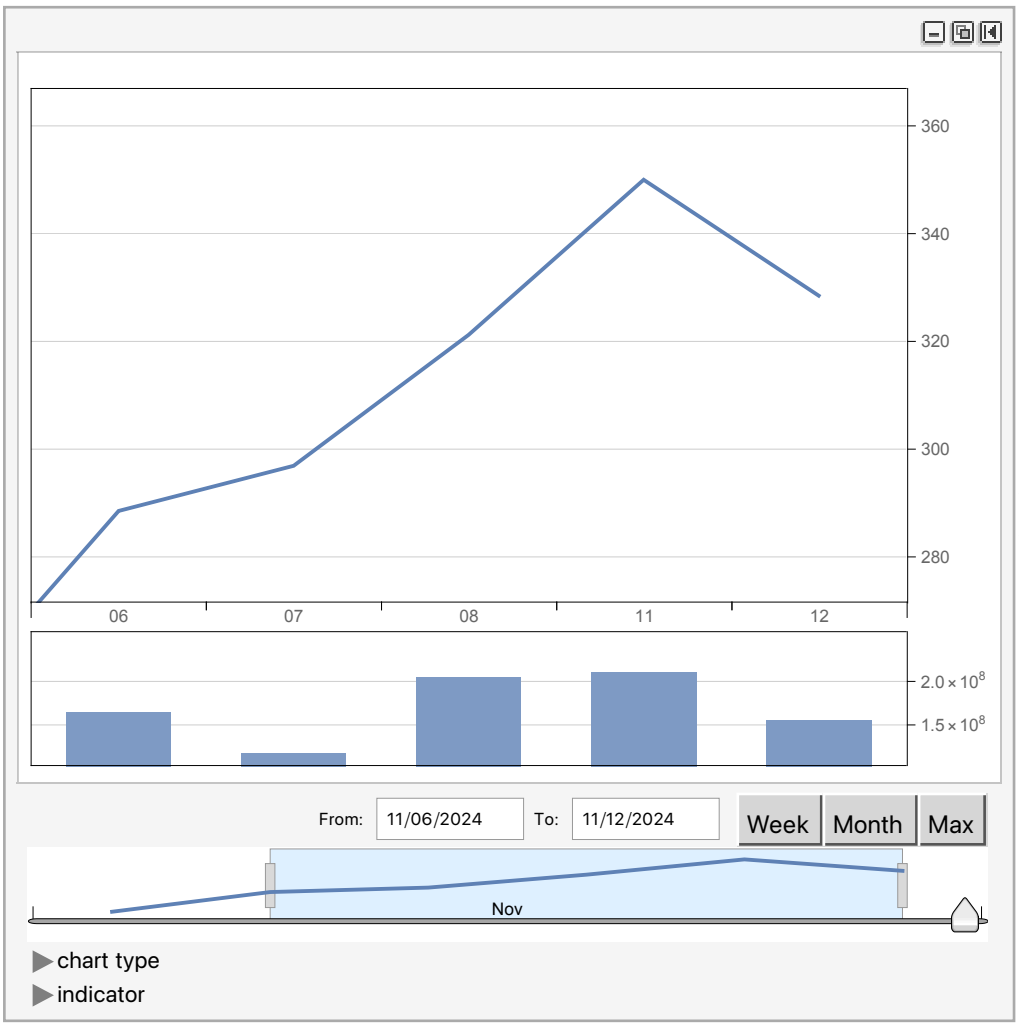
},

{post event, NVIDIA},



},

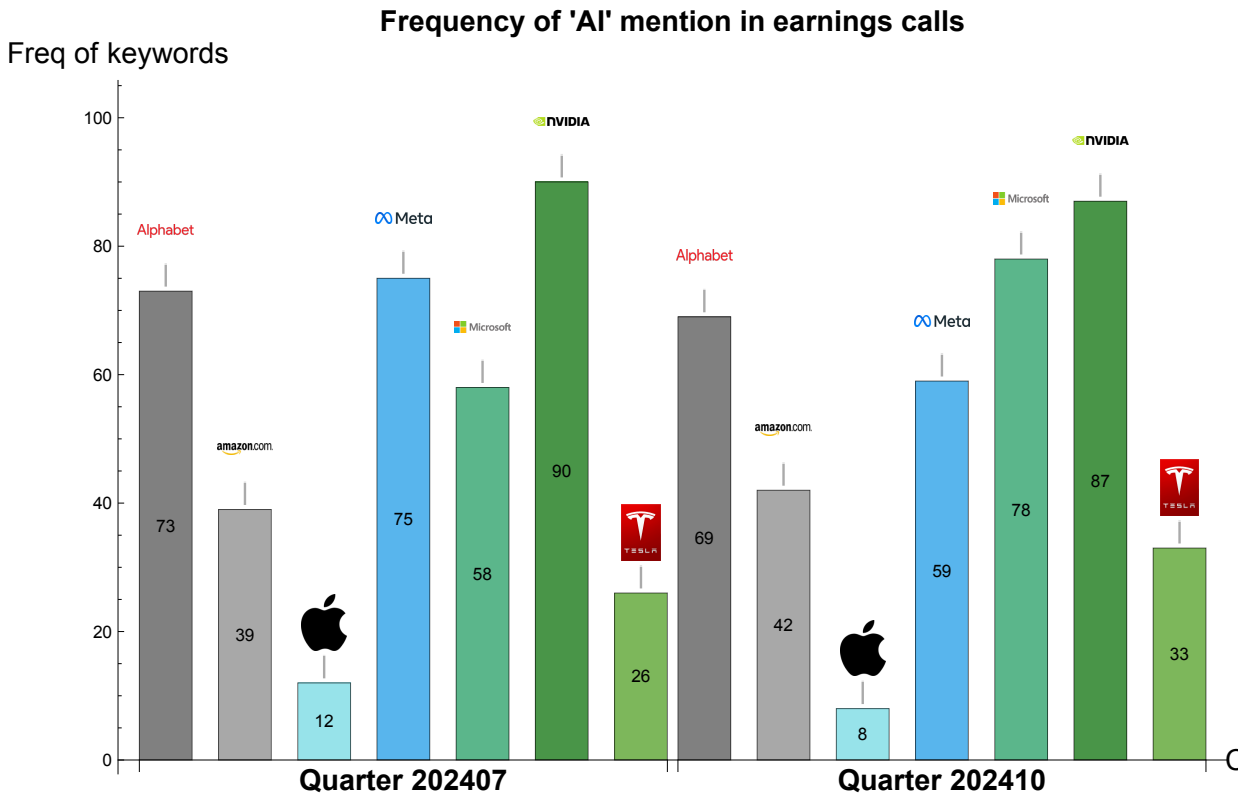
{post event, Tesla Motors},



On 11/05/2024, following the prediction of Trump's victory, the stock prices of the Magnificent 7 saw a notable increase, reflecting market optimism and the anticipation of favorable policies for tech companies under his potential administration.

In[•]:=
```
SetDirectory["/Users/iveshe/Library/Mobile
    Documents/com~apple~CloudDocs/Term 1/BDI 513/Group Project/New/1"];
files202407 = FileNames[];
If[Length[logoSelect] == Length[files202407],
  asso202407 = AssociationThread[logoSelect → Table[myHelperFunctionKeyWords[
       myHelperGetText[files202407[[i]]]], {i, Range@Length[files202407]}]],
  Print["Error: logoSelect and files202407 must have the same length."]];

SetDirectory["/Users/iveshe/Library/Mobile
    Documents/com~apple~CloudDocs/Term 1/BDI 513/Group Project/New/2"];
files202410 = FileNames[];
If[Length[logoSelect] == Length[files202410],
  asso202410 = AssociationThread[logoSelect → Table[myHelperFunctionKeyWords[
       myHelperGetText[files202410[[i]]]], {i, Range@Length[files202410]}]],
  Print["Error: logoSelect and files202410 must have the same length."]];

BarChart[
 {Labeled[asso202407, Style["Quarter 202407", Bold, 15]],
  Labeled[asso202410, Style["Quarter 202410", Bold, 15]]},
 ScalingFunctions → None,
 LabelingFunction → Center,
 ChartLabels → Callout[Keys[asso202410], Above],
 AxesLabel → {Style["Company", 15], Style["Freq of keywords", 15]},
 PlotLabel → Style["Frequency of 'AI' mention in earnings calls", Bold, 15],
 BarSpacing → Large,
 BarOrigin → Bottom,
 ImageSize → 700,
 AspectRatio → 1 / GoldenRatio,
 Background → White,
 ChartStyle → 47
]
```

Out[ ]=



In[ ]:=

```
searchFor1 = "AI";
searchFor2 = "china";
searchSentencesFor1 = Select[ToLowerCase[myHelperGetText[
      "NVIDIA Corporation, Q3 2025 Earnings Call, Nov 20, 2024.pdf"]],
   StringContainsQ[searchFor1]];
searchSentencesFor2 = Select[ToLowerCase[myHelperGetText[
      "NVIDIA Corporation, Q3 2025 Earnings Call, Nov 20, 2024.pdf"]],
   StringContainsQ[searchFor2]];
searchSentences =
  DeleteDuplicates[Join[searchSentencesFor1, searchSentencesFor2]];
TextSummarize[searchSentences]
TextSummarize[searchSentences, "Keywords"]
FindTextualAnswer[searchSentences,
 "Based on the earnings call, what are the headwind and tailwind
    factors for this company when discussing AI and China?"]
LLMFunction[
  "Based on the earnings call, what are the headwind and tailwind factors
    for this company when discussing AI and China?"][searchSentences]
```

Out[ ]=

The data center revenue in China has experienced sequential growth, driven by the export of compliant hopper products to various industries. Despite this growth, the market in China is expected to remain highly competitive. There is an indication that China's performance may decline slightly in the fourth quarter across all configurations. Additionally, there is uncertainty regarding potential changes in tariffs or policies affecting business with China due to the upcoming change in the U.S. administration.

Out[ ]=

{China, Revenue, Data center, Export-compliant, Competitive, Configurations, Administration, Tariffs, Industries, Shipments}

Out[ ]=

rolling

Out[ ]=

To provide a detailed analysis of the headwind and tailwind factors for a company regarding AI and China based on an earnings call, I would need specific information from that call. However, I can outline some common headwinds and tailwinds companies might face in these areas:

AI

Tailwinds:
1. **Innovation and Efficiency:** AI can drive significant improvements in operational efficiency and innovation, leading to cost savings and new product offerings.
2. **Market Demand:** Growing demand for AI-driven solutions across various industries can open new revenue streams.
3. **Competitive Advantage:** Early adoption and development of AI technologies can provide a competitive edge.
4. **Data Utilization:** Companies with large datasets can leverage AI to extract valuable insights, enhancing decision-making and customer experiences.

Headwinds:
1. **Regulatory Challenges:** Increasing scrutiny and regulation around AI, particularly concerning data privacy and ethical use, can pose challenges.
2. **Talent Shortage:** A shortage of skilled AI professionals can hinder development and implementation efforts.
3. **High Costs:** Significant investment is often required for AI research, development, and deployment.
4. **Integration Issues:** Integrating AI into existing systems and processes can be complex and time-consuming.

China

Tailwinds:
1. **Market Growth:** China's large and growing market offers significant opportunities for expansion and increased sales.
2. **Manufacturing and Supply Chain:** China's robust manufacturing capabilities can benefit companies looking to scale production.
3. **Partnership Opportunities:** Collaborations with Chinese firms can lead to new business opportunities and market access.

Headwinds:
1. **Geopolitical Tensions:** Ongoing geopolitical issues, including trade tensions and regulatory barriers, can impact operations and market access.
2. **Regulatory Environment:** Navigating China's regulatory landscape can be challenging, with frequent changes and strict compliance requirements.
3. **Intellectual Property Concerns:** Risks related to IP protection can be a significant concern for companies operating in China.
4. **Local Competition:** Strong competition from local Chinese companies can pose challenges to market entry and growth.

For a more precise analysis, specific details from the earnings call would be necessary to identify the unique headwinds and tailwinds faced by the company in question.

Project 2025

In[ ]:=
```
text =
  Import["/Users/iveshe/Library/Mobile Documents/com~apple~CloudDocs/Term 1/BDI
     513/Group Project/New/2025_MandateForLeadership_FULL.txt", "Text"];

cleanText = StringReplace[text, RegularExpression["[^a-zA-Z ]"] → ""];

words = TextWords[cleanText];

additionalStopwords = {"us", "project", "presidential", "transition", "should",
    "by", "is", "be", "are", "that", "from", "with", "for", "not", "and", "in",
    "to", "of", "the", "on", "as", "or", "a", "an", "will", "has", "would",
    "could", "such", "which", "more", "also", "both", "no", "they", "their",
    "them", "its", "it", "other", "who", "in", "many", "those", "when",
    "next", "at", "were", "was", "any", "so", "this", "department"};

customStopwords = Union[Flatten[{Stopwords["English"], additionalStopwords}]];

meaningfulWords =
  Select[words, ! MemberQ[customStopwords, #] && StringLength[#] > 1 &];

wordFrequenciesList = Tally[meaningfulWords];
wordFrequencies = Association[Rule @@@ wordFrequenciesList];

topKeywords = TakeLargestBy[wordFrequencies, Identity, 100];
WordCloud[Keys[topKeywords]]
```

Out[ ]=

In[•]:=
```
searchFor1 = "security";
searchFor2 = "policy";

text =
  Import["/Users/iveshe/Library/Mobile Documents/com~apple~CloudDocs/Term 1/BDI
     513/Group Project/New/2025_MandateForLeadership_FULL.txt", "Text"];

sentences = TextSentences[text];

searchSentencesFor1 =
  Select[sentences, StringContainsQ[ToLowerCase[#], ToLowerCase[searchFor1]] &];
searchSentencesFor2 =
  Select[sentences, StringContainsQ[ToLowerCase[#], ToLowerCase[searchFor2]] &];

searchSentences =
  DeleteDuplicates[Join[searchSentencesFor1, searchSentencesFor2]];

relevantSentences = Take[searchSentences, 300];
summary = TextSummarize[relevantSentences];
Print["Summary: ", summary];

keywords = TextSummarize[relevantSentences, "Keywords"];
Print["Keywords: ", keywords];

batchSize = 5;
batches = Partition[relevantSentences, UpTo[batchSize]];

question =
  "How does Project 2025 balance security priorities with policy reforms while
    ensuring accountability and rights protection?";

answers = Table[Pause[2];
   FindTextualAnswer[batch, question], {batch, batches}];

Print["Answers: ", answers];
```

Summary:
The text provides a comprehensive analysis of the U.S. Department of Homeland Security and related agencies, focusing on their roles in national security, immigration, and policy development. It highlights the challenges faced by these entities, such as border security and globalization, while emphasizing the importance of maintaining the separation of powers. The National Security Council's role in coordinating national security policy is discussed, along with the need for resource allocation and technological integration to address emerging threats, particularly from China. The text critiques current U.S. national security and defense policies, suggesting reforms to enhance efficiency and address core security issues. Recommendations include restructuring immigration enforcement, improving cybersecurity, and enhancing border protection. The text also underscores the need for a comprehensive strategy to counter threats from China, Russia, and other adversaries, advocating for a "whole of government" approach. Additionally, it calls for reforms within the U.S. Intelligence Community and the U.S. Agency for Global Media to improve accountability and security. Overall, the text outlines a strategic vision for optimizing U.S. national security and defense policies to better protect national interests.

Keywords: {National Security, Homeland Security, Immigration, Border Security, Cybersecurity, Intelligence, China, Border Protection, Defense Policy, Foreign Policy}

```
Answers: {Heritage Foundation, fluent Farsi,
  greatly compromised over the years, tal body within the White House,
  written communications are properly shared among NSC members,
  the PresidentÕs national security goals only if it is made up of personnel
    with technical expertise and experience as well as an alignment,
  drive implementation, demic exercises that undermine our national security
    and leave departments and agencies to their own devices,
  attempt to force their policy preferences on the USTR, daily intelligence briefings,
  weaken our armed forces and discourage our
    nationÕs finest men and women from enlisting, Department,
  Òfast trackÓ, OPM, defensive cyber-effects operations, irregular warfare,
  The mission of the Department of Defense is
    to provide the military forces needed to deter war,
  Cyber Incidents, impartially, threats, departmentÕs homeland,
  an appropriate third alternative would be to consolidate ICE and CBP,
  curtails or limits CBP, would be well-served if ICE were to be combined,
  formed it into an open-borders agency, glaring loopholes,
  pass meaningful legislation to close the current loopholes, agencywide consistency,
  coordinating the execution of national cyber defense and sharing information,
  media company SnapChat, high-paying corporate security jobs,
  prohibits CISOMB from assisting illegal aliens to obtain benefits,
  nearly all of whom have spent more time inside or interacting,
  foreign policy, and national security interests of the United States,
  pled institutionÓ suffering from Òan ineffective organizational structure,
  change, align, PRC attacks and abuse, hemispheric security threats,
  vulnerable to hostile extra-continental powers, neglect a concern,
  Cyberspace protection, Road Map, depoliticized, creating one system, elevated status,
  bottom-up and top-down politicization, the need to use properly main,
  economic interests, national sovereignty, and intellectual prop,
  they must withhold this information, as a necessary procedural function,
  top priority, reclaiming the public trust, pdf, pdf, fired, 29,
  end these practices, staffing positions would not be classified in their
    entirety as Tier 3 and Tier 5 national-security sensitive positions,
  Kennedy pursuant to the Foreign Assistance Act of 19611}
```

In[ ]:=
```
searchFor1 = "law";
searchFor2 = "national";

text =
  Import["/Users/iveshe/Library/Mobile Documents/com~apple~CloudDocs/Term 1/BDI
     513/Group Project/New/2025_MandateForLeadership_FULL.txt", "Text"];

sentences = TextSentences[text];

searchSentencesFor1 =
  Select[sentences, StringContainsQ[ToLowerCase[#], ToLowerCase[searchFor1]] &];
searchSentencesFor2 =
  Select[sentences, StringContainsQ[ToLowerCase[#], ToLowerCase[searchFor2]] &];

searchSentences =
  DeleteDuplicates[Join[searchSentencesFor1, searchSentencesFor2]];

relevantSentences = Take[searchSentences, 300];
summary = TextSummarize[relevantSentences];
Print["Summary: ", summary];

keywords = TextSummarize[relevantSentences, "Keywords"];
Print["Keywords: ", keywords];

batchSize = 5;
batches = Partition[relevantSentences, UpTo[batchSize]];

question =
  "How does Project 2025 address national challenges through reforms in law?";

answers = Table[Pause[2];
   FindTextualAnswer[batch, question], {batch, batches}];

Print["Answers: ", answers];
```

Summary:

The text provides a detailed examination of Project 2025, highlighting the involvement of various conservative think tanks, policy institutes, and advocacy groups in shaping U.S. policy across multiple domains, including law, education, energy, and public policy. It critiques the delegation of legislative powers to federal agencies and the influence of elites, advocating for a President committed to constitutional principles and the rule of law. The document underscores the need for federal governance reform to ensure accountability and efficiency. It addresses issues in immigration enforcement, national security, and civil service, suggesting organizational changes and policy reforms to enhance transparency and adherence to the law. The text also discusses legislative acts related to intelligence, foreign assistance, agriculture, education, and civil rights, advocating for reforms to streamline federal programs and uphold constitutional rights. Additionally, it emphasizes educational choice, parental rights, and energy policy reforms, concluding with a call for executive orders to ensure transparency and fairness in federal operations.

Keywords: {Constitution, Rule of Law, Immigration, Sovereignty, Legislation, Accountability, National Security, Civil Rights, Executive Order, Education}

```
Answers: {Advisory Board
Alabama Policy Institute
Alliance Defending Freedom
American Compass
The American Conservative
America First Legal Foundation
American Accountability Foundation
American Center, Adam Candeub, fluent Farsi,
  Legal and Judicial Studies at The Heritage Foundation, undergraduate degrees,
  Pornography, dedicatedÑself-governance, the rule of law, and ordered liberty,
  aban.doned, executives, EOP, pdf,
  increasingly weaponized against the public and a President who is
    elected by the people and empowered by the Constitution to govern,
  10 days after submission, Section 115, pdf, pdf, within a decade,
  just provide the opportunity to create a more comprehensive performance plan, section1,
  pdf, pdf, light amphibious warships, 114-328, impartially, total information-sharing,
  utilizing the agencyÕs aviation assets to facilitate official travel, defined,
  requires access, databases, outside the immediate vicinity of the White House,
  immigration judges and Board of Immigration Appeals, pdf, pdf, pdf,
  8 enacted into law to motivate countries to accept the return of any nationals who
    have been ordered removed from the U.S., should be quickly and fully enforced,
  context=vjtl, struck down prior data privacy frameworks, 5.    H.R. 2845,
  pdf, goals of the U.S. government, career hiring/firing mechanisms,
  mailing abortifacients, a very narrow mission focused on the dissemi,
  limit the use of permanent easements and collaborate with lawmakers to prohibit
    the USDA from creating new permanent easements.99, codify, 114Đ216,
  grams as federal ÒsolutionsÓ, a Department of Education Reorganization Act,
  everything presumed illegal unless given special dispensation,
  School Lunch Program, a prohibition, by the department,
  Disabilities Education Act, federal taxpayer spending, non-binding,
  93-112, dispose of nuclear waste, will need to be amended,
  limit regulatory overreach and protect against excessively stringent standards, pdf}
```

Conclusion

Our analysis combined multiple approaches and data sources to explore the 2024 U.S. presidential election, its potential impacts, and connections to broader issues like AI and U.S.-China relations.

We started by analyzing USElectionAtlasData for the 2020 and 2024 elections, focusing on trends in key swing states. While the divide between “red” and “blue” states remained stable, battleground states like Georgia, Michigan, and Pennsylvania showed noticeable shifts from slightly Democratic in 2020 to leaning Republican in 2024. Factors like government policies, economic conditions, and social issues likely influenced these changes. Using heat maps, we visualized these trends, showing increasing Republican support in states like Arizona, Georgia, and Florida, emphasizing the critical role of swing states in shaping election outcomes.

To complement this, we used Google Search data to compare the online popularity of Trump and Harris. Trump consistently had higher search interest across all states, which may indicate stronger public engagement or recognition. This "internet poll" approach provided unique insights into public sentiment and media-driven attention.

Building on this, we conducted an event study to examine how the predicted election results impacted the stock performance of the Magnificent Seven companies. Following the prediction of Trump's victory on November 5, 2024, the companies' stock prices saw an immediate increase, reflecting market optimism and expectations of tech-friendly policies under his potential administration.

We also analyzed earnings calls from the Magnificent Seven, focusing on their strategies related to AI. NVIDIA stood out with its advancements in AI, especially in the context of its relationship with China. Through this, we identified key opportunities like innovation and efficiency while noting challenges such as regulatory hurdles, talent shortages, and geopolitical tensions, particularly with China.

Finally, we analyzed Project 2025 to understand Trump's potential policy directions. Using word clouds and keyword-focused analyses, we found an emphasis on national security, governance reform, and AI-related policies. Project 2025 highlighted a vision to address emerging threats, streamline operations, and increase transparency, aligning with broader geopolitical and technological challenges faced by companies like the Magnificent Seven.

In conclusion, our study illustrates the intersection between political events, market performance, and technological trends. The 2024 presidential election not only influenced political dynamics but also affected corporate strategies and market responses, particularly in the tech sector. By connecting these elements, our analysis provides a well-rounded perspective on how major events shape both public and private sectors.