

```

import pandas as pd
import numpy as nm
from sklearn.model_selection import train_test_split as ttp
from sklearn.metrics import classification_report
import re
import string
import matplotlib.pyplot as plt

data_true=pd.read_csv("/content/drive/MyDrive/True.csv")
data_fake=pd.read_csv("/content/drive/MyDrive/Fake.csv")

data_true.head(5)

{"summary":{"\n  \"name\": \"data_true\",\n  \"rows\": 21417,\n  \"fields\": {\n    \"column\": \"title\",\n  \"properties\": {\n    \"dtype\": \"string\",\n  \"num_unique_values\": 20826,\n    \"samples\": [\n  \"German, Turkish foreign ministers meet after detainee released\",\n  \"Kremlin calls North Korea's latest missile launch another\n  'provocation'\",\n    \"Transgender soldiers, veterans shaken by\n  Trump's ban on their service\",\n    ],\n    \"semantic_type\":\n  \"\",\n    \"description\": \"\"\n  },\n  {\n  \"column\": \"text\",\n  \"properties\": {\n    \"dtype\":\n  \"string\",\n    \"num_unique_values\": 21192,\n  \"samples\": [\n    \"WASHINGTON (Reuters) - A majority of the\n  U.S. Senate on Tuesday backed a new round of disaster aid to help\n  Puerto Rico and several states recover from damage from hurricanes and\n  wildfires. The legislation would provide $36.5 billion in emergency\n  relief as Puerto Rico in particular struggles to regain electricity\n  and other basic services following destructive hurricanes. The House\n  of Representatives approved the bill earlier this month. The Trump\n  administration already has indicated it will seek another round of\n  emergency relief from Congress. \",\n    \"BUDAPEST (Reuters) -\n  About a thousand Hungarians protested on Friday against a crackdown on\n  the main opposition party Jobbik which has been threatened by a\n  record political campaign fine that the party leader describes as a\n  death sentence for democracy. Despite the gloomy rhetoric and Jobbik\n  saying it was fighting for survival, support for the demonstration was\n  well down on other similar rallies over the past year. Hungarians will\n  vote for a new parliament in April and Prime Minister Viktor Orban s\n  conservative, anti-migrant Fidesz party is far ahead in the polls,\n  with Jobbik its nearest rival. Jobbik, once on the far right, has\n  turned toward the center in a bid to attract more support and is now\n  campaigning nationwide against Orban, depicting him as the leader of a\n  criminal gang. Orban, rejecting the charges, says his financial\n  standing is an open book . Last week the state audit office (ASZ)\n  ruled Jobbik had bought political posters far below market prices,\n  breaching rules on political funding, then it slapped a 663 million\n  forint ($2.5 million) penalty on the party. The protesters, waving\n  Jobbik flags and posters deriding the ruling elite, gathered outside

```

the headquarters of Orban's Fidesz party. What we see unfolding is not an audit office investigation. It is not an official penalty. This is a death sentence with Jobbik's name on it. But in reality, it is a death sentence for Hungarian democracy, Jobbik leader Gabor Vona told the crowd. A government spokesman could not comment immediately on his remarks. ASZ chairman Laszlo Domokos is a former Fidesz lawmaker, whom Jobbik and other critics accuse of making decisions in favor of Orban. The audit office denies that. On Friday, ASZ again called on Jobbik to submit information that would challenge its findings, saying it acted fully within its rights throughout the probe. The ruling Fidesz party and the government have denied any involvement in the ASZ probe. This case has nothing to do with the election campaign, Orban aide Janos Lazar said on Thursday. For over a year Fidesz has targeted Jobbik, whose move to the center could upend the longstanding status quo of a dominant Fidesz with weaker opponents to its left and its right, said analyst Zoltan Novak at the Centre for Fair Political Analysis. Gyorgy Illes, a 67-year-old pensioner attending the rally, said he used to be a Socialist supporter but got disillusioned as the party struggled to overcome its internal divisions. This ASZ probe is a clear sign that Orban is way past any remedy. It is a ruthless attack on everything we hold dear. Democracy, the rule of law, equality, you name it, he said. \", \n \"/>BEIJING/TAIPEI (Reuters) - China accused the United States on Thursday of interfering in its internal affairs and said it had lodged a complaint after U.S. President Donald Trump signed into law an act laying the groundwork for possible U.S. navy visits to self-ruled Taiwan. Tensions have risen in recent days after a senior Chinese diplomat threatened China would invade Taiwan if any U.S. warships made port visits to the island which China claims as its own territory. On Monday, Chinese jets carried out island encirclement patrols around Taiwan, with state media showing pictures of bombers with cruise missiles slung under their wings as they carried out the exercise. On Tuesday, Trump signed into law the National Defense Authorization Act for the 2018 fiscal year, which authorizes the possibility of mutual visits by navy vessels between Taiwan and the United States. Such visits would be the first since the United States ended formal diplomatic relations with Taiwan in 1979 and established ties with Beijing. Chinese Foreign Ministry spokesman Lu Kang said while the Taiwan sections of the law were not legally binding, they seriously violate the One China policy and constitute an interference in China's internal affairs. China is resolutely opposed to this, and we have already lodged stern representations with the U.S. government, Lu told a daily news briefing. China is firmly opposed to any official exchanges, military contact, or arms sales between Taiwan and the United States, he added. Proudly democratic Taiwan has become increasingly concerned with the ramped up Chinese military presence, that has included several rounds of Chinese air force drills around the island in recent months. Taiwan is confident of its defenses and responded quickly to the Chinese air force drills

this week, its government said, denouncing the rise in China's military deployments as irresponsible. Taiwan presidential spokesman Alex Huang, speaking to Taiwan media in comments reported late on Wednesday, said the defense ministry had kept a close watch on the patrols and responded immediately and properly. Taiwan can ensure there are no concerns at all about national security, and people can rest assured, Huang said. Both sides of the narrow Taiwan Strait, which separates Taiwan from its giant neighbor, have a responsibility to protect peace and stability, he added. Such a raised military posture that may impact upon and harm regional peace and stability and cross-strait ties does not give a feeling of responsibility, and the international community does not look favorably upon this, Huang was quoted as saying. Relations have soured considerably since Tsai Ing-wen, who leads Taiwan's independence-leaning Democratic Progressive Party, won presidential elections last year. China suspects Tsai wants to declare the island's formal independence, a red line for Beijing. Tsai says she wants to maintain peace with China but will defend Taiwan's security. Taiwan is well equipped with mostly U.S. weapons but has been pressing for more advanced equipment to deal with what it sees as a rising threat from China. The United States is bound by law to provide the island with the means to defend itself. China has never renounced the use of force to bring Taiwan under its control. \\n

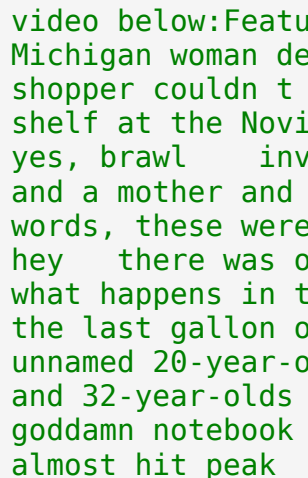
```
],\n      \"semantic_type\": \"\",\n      \"description\": \"\"\n}\n  },\n  {\n    \"column\": \"subject\", \n    \"properties\": {\n      \"dtype\": \"category\", \n      \"num_unique_values\": 2,\n      \"samples\": [\n        \"worldnews\", \n        \"politicsNews\" \n      ], \n      \"semantic_type\": \"\", \n      \"description\": \"\" \n    }, \n    {\n      \"column\": \"date\", \n      \"properties\": {\n        \"dtype\": \"object\", \n        \"num_unique_values\": 716,\n        \"samples\": [\n          \"September 2, 2017 \" ,\n          \"February 2, 2017 \" \n        ], \n        \"semantic_type\": \"\", \n        \"description\": \"\" \n      } \n    } \n  ]\n  },\n  \"type\": \"dataframe\", \"variable_name\": \"data_true\"}
```

```
data_fake.head(5)
```

```
{\"summary\": \"{ \n  \"name\": \"data_fake\", \n  \"rows\": 23481, \n  \"fields\": [\n    {\n      \"column\": \"title\", \n      \"properties\": {\n        \"dtype\": \"string\", \n        \"num_unique_values\": 17903, \n        \"samples\": [\n          \"Fox News Mocked Into Oblivion After This F*cking STUPID Attempt To Make Steve Bannon Look Sane (TWEETS)\", \n          \"BREAKING: FL GOV RICK SCOTT Calls for FBI Director to Resign\", \n          \"WATCH: Mike Pence\\u2019s Photo Op With Puerto Rico Survivors Just Went TERRIBLY Wrong (VIDEO)\" \n        ], \n        \"semantic_type\": \"\", \n        \"description\": \"\" \n      } \n    }, \n    {\n      \"column\": \"text\", \n      \"properties\": {\n        \"dtype\": \"string\", \n        \"num_unique_values\": 17455, \n        \"samples\": [\n          \"The moral decay continues The Kapiolani
```

Medical Center for Women and Children at the University of Hawaii is currently recruiting pregnant girls and women to participate in second-trimester abortions to measure their bleeding during the operation, with and without antihemorrhagic drugs. According to the Clinical Trials website, run by the National Institutes of Health, participants must be at least 14 years old and 18-24 weeks pregnant. The controversial study, led by Bliss Kaneshiro, MD and Kate Whitehouse, DO, will monitor bleeding during D&E abortions to determine the effects of the drug oxytocin, commonly used to minimize blood loss and decrease the risk of hemorrhage. The clinical trial, called Effects of Oxytocin on Bleeding Outcomes during Dilation and Evacuation began in October 2014 and is a collaboration between UH, Society of Family Planning and the University of Washington. The Society of Family Planning funds a number of similar research projects, such as experimenting with the dosage of Misoprostol, a uterine contracting agent, prior to surgical abortions at 13-18 weeks and exploring umbilical cord injections to produce fetal death prior to late-term abortions. In the UH study, researchers will carry out a randomized, double-blinded, placebo-controlled trials, to determine the effect of oxytocin's use on uterine bleeding, meaning that they will either provide or deny intravenous oxytocin to the women. Reports suggest that some doctors are concerned that withholding oxytocin during surgery may put patients, especially teen girls, at risk. This study is reminiscent of Nazi concentration camp experiments. I pity the poor women who are being treated like lab rats, especially those who are denied the drug to reduce hemorrhaging, said Troy Newman, President of Operation Rescue. Dilation and evacuation abortions are surgical procedures that involve dismembering the pre-born baby with forceps, scraping the inside of the uterus with a curette to remove any residuals and finally suctioning out the womb to make sure the contents are completely removed. After the abortion, the corpse of the fetus is reassembled and examined to ensure everything was successfully removed and that the abortion was complete. The study is hoping to attract up to 166 test subjects and is expected to conclude in July 2015.

Via: Breitbart News\", \n \"CNN was quick to scoop up Corey Lewandowski after Donald Trump kicked him out of his role as campaign manager, but his first week on the job is going pretty much exactly how you would expect it to go terribly. Not only has Lewandowski proven himself to be pretty much like a paid spokesman for Trump, but his defense of the disgraced GOP candidate isn't being received well. Earlier this week, Lewandowski revealed that he was under contract and couldn't criticize The Donald, even after being fired from the campaign. Today, Lewandowski got called out by Hillary Clinton surrogate Christine Quinn for hyping Trump up to be an expert on the Brexit decision a suggestion that was clearly false. On Monday's edition of CNN's New Day, Lewandowski made another pathetic defense of Trump by trying to reframe the candidate's disgusting reaction to Brexit, where he mostly spoke about how much the decision would be good for his Scotland golf resort. Lewandowski's defense was:

Obviously the U.S. dollar has become much stronger now against the British pound. If you're going to spend money in Europe, now would actually be a good time to go with the fall of the pound. What you have is a world view, so what you have is someone who is saying, Let's look at this from the U.S. perspective. If you want to go and travel overseas just from a monetary perspective now is the right time to do that because what you're getting is more for your dollar. Quinn wasn't having it. She ripped into Lewandowski, firing back, Donald Trump is not running to be travel agent of the world, he's running to be president of the United States. She continued: What he said wasn't a commentary on international markets, it was, When the pound goes down, more people will come to my golf course. Donald Trump's main concern isn't the international markets, it isn't the impact that Brexit will have on hard working Americans' 401ks, it's himself. How can he make more money, how can he put more money in his bank account? Lewandowski compared the Brexit decision to Trump's rise in the GOP, and Quinn once again called him out and put him back in his place. She said: Trump touted that he saw this coming. That's ridiculous because when he was first asked about Brexit by the press, he didn't appear to know what it was. Lewandowski tried to counter by insisting that People are too smart, they are tired of being told what to do. He then tried to commend Trump for being a selfish moron: You know what Donald Trump said about Brexit? What he said was, you don't have to listen to me because it's not my decision. He didn't weigh in like Hillary Clinton did, like Barack Obama did, saying that you can't do this. Quinn fought back, Because he didn't know what it was. Lewandowski was fighting a losing battle. Trump's reaction to Brexit was just as terrifying as it was humorous it truly proved that Trump knows nothing about foreign affairs, and hasn't spent any time educating himself since the beginning of his presidential candidacy. If only some of the hours he spent getting into fights on Twitter were being used for learning about how the world works. But instead, he once again exposed himself as an unfit choice for President. And when people like Lewandowski try to make sense of his idiocy, they only make themselves look equally foolish. You can watch the embarrassing video below: [Featured image via screen capture](#)  [Michigan woman decided to defend against tyranny? when she and another shopper couldn't agree over who got to buy the last notebook on the shelf at the Novi Towne Center store.](#) According to ABC 13, the brawl yes, brawl involved two Farmington Hills residents, ages 46 and 32, and a mother and daughter from South Lyon, ages 51 and 20. In other words, these were all grown adults who should have known better but hey there was only one notebook on the shelf, and we've all seen what happens in those post-apocalyptic movies when a store is down to the last gallon of milk, right? Two of the women, one of whom was the unnamed 20-year-old, reached for the notebook at the same time. The 46 and 32-year-olds apparently decided that she wasn't getting their goddamn notebook and began pulling her hair. Then, because this had almost hit peak trailer park, the 20-year-old's mother decided to go

```

for bonus points by pulling out her gun. Fortunately, someone pushed
her aside before she could do any harm.This is one of the NRA s
responsible gun owners (conservatives can t dismiss this one, as it
is confirmed that she is a concealed carry permit holder) ready to
leap into action at the most minor sign of danger and make things
worse by turning the situation potentially deadly.Watch it happen
below:Featured image via screengrab"\n      ],\n
\"semantic_type\": \"\", \n      \"description\": \"\"\n    }\n
    },\n    {\n      \"column\": \"subject\", \n      \"properties\":\n    {\n      \"dtype\": \"category\", \n      \"num_unique_values\":\n    6,\n      \"samples\": [\n        \"News\", \n        \"politics\", \n        \"Middle-east\"\n      ],\n      \"semantic_type\": \"\", \n      \"description\": \"\"\n    }\n    },\n    {\n      \"column\": \"date\", \n      \"properties\": {\n      \"dtype\": \"category\", \n      \"num_unique_values\": 1681,\n      \"samples\": [\n        \"Jun 5, 2015\", \n        \"August 28,\n    2016\", \n        \"June 3, 2017\"\n      ],\n      \"semantic_type\": \"\", \n      \"description\": \"\"\n    }\n    }\n  ]\n}","type":"dataframe","variable_name":"data_fake"}

```

```
data_true.shape,data_fake.shape
```

```
((21417, 4), (23481, 4))
```

```
data_true["class"]=1
```

```
data_fake["class"]=0
```

```
data_true_manual_testing=data_true.tail(10)
```

```
for i in range(21416,21406,-1):
    data_true.drop([i],axis=0,inplace=True)
```

```
data_fake_manual_testing=data_fake.tail(10)
```

```
for i in range(21416,21406,-1):
    data_fake.drop([i],axis=0,inplace=True)
```

```
data_manual_testing=pd.concat([data_fake_manual_testing,data_true_manu
al_testing],axis=0)
```

```
data_manual_testing.to_csv("manual_testing.csv")    # Removed extra
space at the beginning of this line
```

```
data_merge=pd.concat([data_true,data_fake],axis=0)
```

```
data_merge.head(10)
```

```

{"summary":{"\n  \"name\": \"data_merge\", \n  \"rows\": 44878, \n
  \"fields\": [\n    {\n      \"column\": \"title\", \n
    \"properties\": {\n      \"dtype\": \"string\", \n
    \"num_unique_values\": 38717, \n      \"samples\": [\n
    \"TEFLON DON: \\\u201cYou Bet Your Ass\\\u201d I\\\u2019d Approve
Waterboarding, \\\u201cIf It Doesn\\\u2019t Work, They Deserve It
Anyway\\\u201d [VIDEO]\", \n      \"Kenyan president says repeat
election must be held within set time\", \n      \"VIDEO: College

```



Students Burn ISIS Flag On Campus While Onlookers Chant: \\u201cUSA, USA, USA!\\u201d\\n ],\\n \\\"semantic\_type\\\": \\\"\\\",\\n \\\"description\\\": \\\"\\\"\\n }\\n },\\n {\\n \\\"column\\\": \\\"text\\\",\\n \\\"properties\\\": {\\n \\\"dtype\\\": \\\"string\\\",\\n \\\"num\_unique\_values\\\": 38633,\\n \\\"samples\\\": [\\n \\\"BEIJING (Reuters) - A senior Chinese space official and military officer has been promoted to run the People s Liberation Army s key equipment development department, the military said on Monday, part of a reshuffle ahead of next month s Communist Party congress. China s armed forces, the world s largest, are ramping up their capabilities with new equipment like aircraft carriers and stealth fighters as the country pursues a more assertive stance in the disputed East and South China Seas and seeks to project power far from home shores. In a brief story on its website about a military technology exhibition in Beijing, the Defence Ministry named Li Shangfu as the new head of the military s Equipment Development Department. It gave no other details of his appointment. According to his official resume, Li was previously director of one of China s main satellite launch sites in Xichang in the southwestern province of Sichuan and has been involved in missions to explore the moon. The U.S. Defense Department has highlighted China s increasing space capabilities, saying it was pursuing activities aimed at preventing other nations from using space-based assets in a crisis. China insists it has only peaceful ambitions in space, but has tested anti-satellite missiles. Li, 59, takes over from Zhang Youxia, who has likely reached retirement age. Li could be promoted to Zhang s position on the Central Military Commission, which is in overall charge of the People s Liberation Army, when the party holds its once-in-five-years congress in Beijing next month. However, sources familiar with the matter have told Reuters that the commission may be cut down to Xi and four vice-chairmen, doing away with committee members and streamlining reporting lines. President Xi Jinping, who is commander-in-chief of China s armed forces, currently chairs the commission, which also comprises two vice-chairmen and eight committee members. China s military is preparing a sweeping leadership reshuffle, dropping top generals, including two that sources say are under investigation for corruption. China earlier this month also appointed new commanders for its army and air force. \\\",\\n \\\"WASHINGTON (Reuters) - President Donald Trump on Tuesday was scheduled to interview two candidates to replace James Comey as head of the FBI, former agency No. 2 James Pistole and former Assistant Attorney General Chris Wray, the White House said. The interviews mark a re-start of sorts for the search to find someone to replace Comey, who Trump fired on May 9. Trump said earlier this month he was \\\"very close\\\" to picking a nominee for the post and he had already met with several candidates. \\\"The president will be meeting with two additional candidates this afternoon, both Chris Wray and John Pistole,\\\" White House spokesman Sean Spicer told reporters. \\\"When the president feels as though he\\\"s met with the right candidate he\\\"ll let us

know.\\u201d Pistole, the former head of the Transportation Security Administration, served as deputy director of the Federal Bureau of Investigation from 2004 to 2010. USA Today was first to report that Trump would be meeting with Pistole. Wray served as assistant attorney general in charge of the Justice Department\\u2019s Criminal Division from 2003 to 2005. Comey was leading an FBI probe into possible collusion between Trump\\u2019s campaign and Russia to sway the 2016 presidential election. His dismissal prompted an outcry from Democrats and some Republican lawmakers and raised questions about whether the president was trying to interfere with the investigation. The week after Comey was fired, reports emerged that Trump had asked Comey to end the agency\\u2019s investigation into ties between former White House national security adviser Michael Flynn and Russia, according to a source who has seen a memo of the conversation written by Comey. The Department of Justice appointed a special counsel, former FBI director Robert Mueller, to head an independent investigation of the Russia matter. \\",\\n \\\"They whined and fear mongered, but in the end, Republicans had to sit and watch as Oregon took action to help struggling workers make a fair living.On Wednesday, Oregon Governor Kate Brown signed a bill into law raising the state minimum wage to the highest in the country, but in a unique way that takes into consideration the differences between urban and rural business growth.According to The Oregonian:The bill gives Oregon the highest statewide minimum wage rates in the nation, to \$14.75 inside Portland s urban growth boundary, \$13.50 in midsize counties and \$12.50 in rural areas by 2022.The law was agreed upon by labor unions and businesses in a compromise that should stand as proof that both sides can work together for the common good of the hardworking people who are trying to feed and cloth their families.Governor Brown expressed pride at what Oregon Democrats have achieved for families across the state with the help of unions and businesses. I am extremely proud of the collaborative spirit of the stakeholder groups that worked to develop this legislation. Oregon has not only avoided a number of potentially problematic ballot measures, we have taken a very smart approach in a way that makes sense for workers and for businesses no matter where in Oregon they are. On Facebook, Brown wrote that the new law will ensure hard-working Oregonians get a much-needed raise in order to keep up with rising costs of rent, food, and other necessities. Even President Obama praised the new wage hike in a statement via the White House, and called upon Congress to do the same for the rest of the nation.I commend the Oregon Legislature and Governor Kate Brown for taking action to raise their state s minimum wage. Since I first called on Congress to increase the federal minimum wage in 2013, 18 states and the District of Columbia have acted on their own. These efforts will boost the paychecks of hardworking Americans and help support millions of workers trying to make ends meet. Today, more than half of our states guarantee their workers a wage higher than the federal minimum. That s progress. But Congress needs to keep up with the rest of the country. They need to act, and



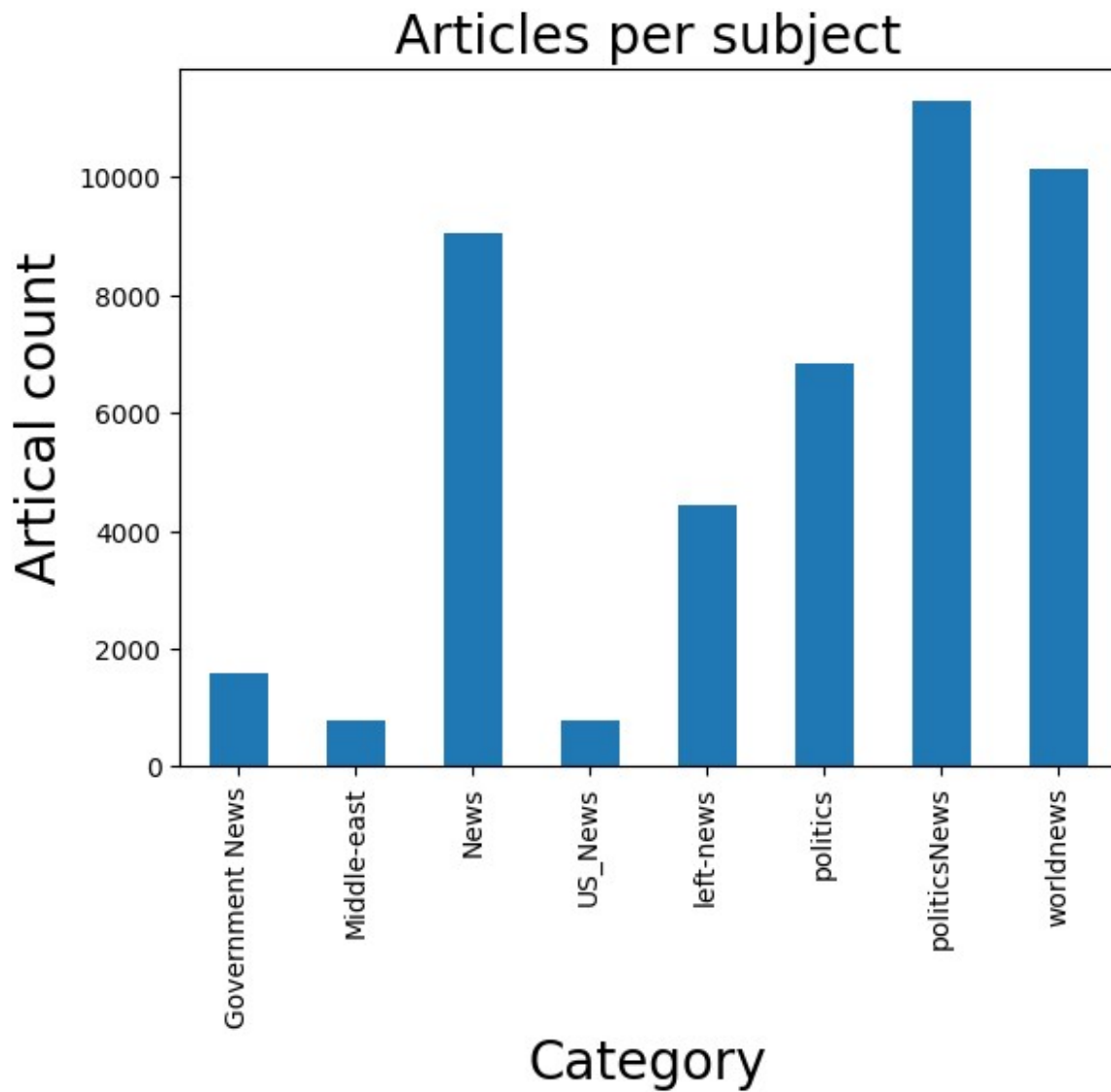
finally give America a raise. And until they do, I ll continue to encourage states, cities, counties and companies to act on their own to support hardworking families.This is a great day for Oregon workers, who must be a little more excited than usual to go to work now that they know they ll be taking home much more needed income to provide for themselves and their families.The same cannot be said for most of Republican-controlled Alabama and other red states.

Republicans there recently passed a law banning counties and cities from increasing the minimum wage within their own boundaries, making clear that they have no intention of raising the minimum wage in that state for the foreseeable future.So while people in Oregon can have hope that the future will be financially brighter, people in Alabama are struck and that s why it doesn t make sense for people to vote for Republicans. Featured image via KPTV

```
],\n
\"semantic_type\": \"\", \n      \"description\": \"\"\n    },\n    {\n      \"column\": \"subject\", \n      \"properties\": {\n        \"dtype\": \"category\", \n        \"num_unique_values\": 8,\n        \"samples\": [\n          \"worldnews\", \n          \"left-news\", \n          \"politicsNews\"\n        ], \n      \"semantic_type\": \"\", \n      \"description\": \"\"\n    },\n    {\n      \"column\": \"date\", \n      \"properties\": {\n        \"dtype\": \"category\", \n        \"num_unique_values\": 2397,\n        \"samples\": [\n          \"October 12, 2016 \", \n          \"June 16, 2017 \", \n          \"Oct 30, 2017\"\n        ], \n      \"semantic_type\": \"\", \n      \"description\": \"\"\n    },\n    {\n      \"column\": \"class\", \n      \"properties\": {\n        \"dtype\": \"number\", \n        \"std\": 0,\n        \"min\": 0,\n        \"max\": 1,\n        \"num_unique_values\": 2,\n        \"samples\": [\n          0,\n          1\n        ], \n      \"semantic_type\": \"\", \n      \"description\": \"\"\n    }\n  ]\n}, \"type\": \"dataframe\", \"variable_name\": \"data_merge\"}
```

```
print(data_merge.groupby(['subject'])['text'].count())
data_merge.groupby(['subject'])['text'].count().plot(kind="bar")
plt.title("Articles per subject",size=20)
plt.xlabel("Category",size=20)
plt.ylabel("Artical count",size=20)
plt.show()
```

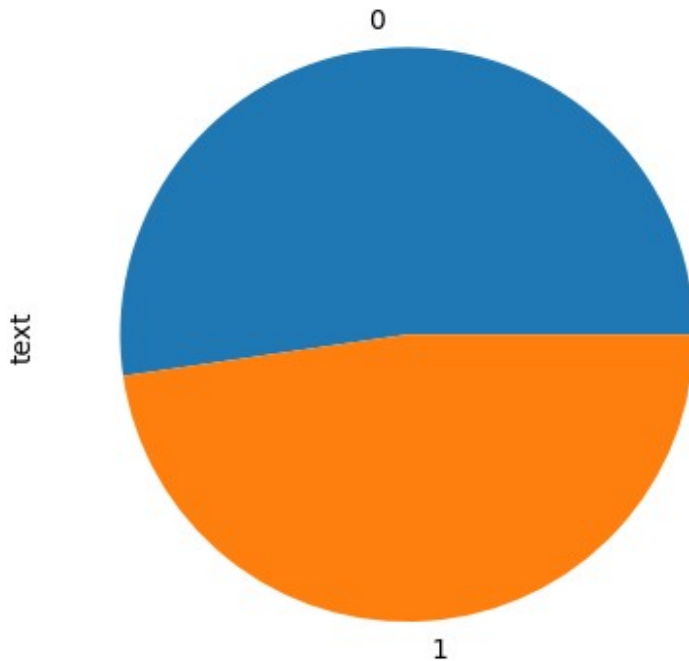
```
subject
Government News    1570
Middle-east        778
News               9050
US_News            783
left-news          4449
politics           6841
politicsNews       11272
worldnews          10135
Name: text, dtype: int64
```



```
print(data_merge.groupby(['class'])['text'].count())
print("0 = Fake News\n1 = True News")
data_merge.groupby(['class'])['text'].count().plot(kind="pie")
plt.title("Fake News vs True News",size=20)
plt.show()
```

```
class
0    23471
1     21407
Name: text, dtype: int64
0 = Fake News
1 = True News
```

# Fake News vs True News



```
data=data_merge.drop(["title","subject","date"],axis=1)
data.head(10)
```

```
{"summary":{"\n  \"name\": \"data\", \n  \"rows\": 44878, \n  \"fields\": [\n    {\n      \"column\": \"text\", \n      \"properties\": {\n        \"dtype\": \"string\", \n        \"num_unique_values\": 38633, \n        \"samples\": [\n          \"BEIJING (Reuters) - A senior Chinese space official and military officer has been promoted to run the People's Liberation Army's key equipment development department, the military said on Monday, part of a reshuffle ahead of next month's Communist Party congress. China's armed forces, the world's largest, are ramping up their capabilities with new equipment like aircraft carriers and stealth fighters as the country pursues a more assertive stance in the disputed East and South China Seas and seeks to project power far from home shores. In a brief story on its website about a military technology exhibition in Beijing, the Defence Ministry named Li Shangfu as the new head of the military's Equipment Development Department. It gave no other details of his appointment. According to his official resume, Li was previously director of one of China's main satellite launch sites in Xichang in the southwestern province of Sichuan and has been involved in missions to explore the moon. The U.S. Defense Department has highlighted China's increasing space capabilities, saying it was pursuing activities aimed at preventing other nations from using space-based assets in a crisis. China insists it has only peaceful
```

ambitions in space, but has tested anti-satellite missiles. Li, 59, takes over from Zhang Youxia, who has likely reached retirement age. Li could be promoted to Zhang's position on the Central Military Commission, which is in overall charge of the People's Liberation Army, when the party holds its once-in-five-years congress in Beijing next month. However, sources familiar with the matter have told Reuters that the commission may be cut down to Xi and four vice-chairmen, doing away with committee members and streamlining reporting lines. President Xi Jinping, who is commander-in-chief of China's armed forces, currently chairs the commission, which also comprises two vice-chairmen and eight committee members. China's military is preparing a sweeping leadership reshuffle, dropping top generals, including two that sources say are under investigation for corruption. China earlier this month also appointed new commanders for its army and air force.

WASHINGTON (Reuters) - President Donald Trump on Tuesday was scheduled to interview two candidates to replace James Comey as head of the FBI, former agency No. 2 James Pistole and former Assistant Attorney General Chris Wray, the White House said. The interviews mark a re-start of sorts for the search to find someone to replace Comey, who Trump fired on May 9. Trump said earlier this month he was "very close" to picking a nominee for the post and he had already met with several candidates. "The president will be meeting with two additional candidates this afternoon, both Chris Wray and John Pistole," White House spokesman Sean Spicer told reporters. "When the president feels as though he's met with the right candidate he'll let us know." Pistole, the former head of the Transportation Security Administration, served as deputy director of the Federal Bureau of Investigation from 2004 to 2010. USA Today was first to report that Trump would be meeting with Pistole. Wray served as assistant attorney general in charge of the Justice Department's Criminal Division from 2003 to 2005. Comey was leading an FBI probe into possible collusion between Trump's campaign and Russia to sway the 2016 presidential election. His dismissal prompted an outcry from Democrats and some Republican lawmakers and raised questions about whether the president was trying to interfere with the investigation. The week after Comey was fired, reports emerged that Trump had asked Comey to end the agency's investigation into ties between former White House national security adviser Michael Flynn and Russia, according to a source who has seen a memo of the conversation written by Comey. The Department of Justice appointed a special counsel, former FBI director Robert Mueller, to head an independent investigation of the Russia matter.

"They whined and fear mongered, but in the end, Republicans had to sit and watch as Oregon took action to help struggling workers make a fair living. On Wednesday, Oregon Governor Kate Brown signed a bill into law raising the state minimum wage to the highest in the country, but in a unique way that takes into consideration the differences between urban and rural business growth. According to The Oregonian: The bill gives Oregon the highest

statewide minimum wage rates in the nation, to \$14.75 inside Portland's urban growth boundary, \$13.50 in midsize counties and \$12.50 in rural areas by 2022. The law was agreed upon by labor unions and businesses in a compromise that should stand as proof that both sides can work together for the common good of the hardworking people who are trying to feed and cloth their families. Governor Brown expressed pride at what Oregon Democrats have achieved for families across the state with the help of unions and businesses. I am extremely proud of the collaborative spirit of the stakeholder groups that worked to develop this legislation. Oregon has not only avoided a number of potentially problematic ballot measures, we have taken a very smart approach in a way that makes sense for workers and for businesses no matter where in Oregon they are. On Facebook, Brown wrote that the new law will ensure hard-working Oregonians get a much-needed raise in order to keep up with rising costs of rent, food, and other necessities. Even President Obama praised the new wage hike in a statement via the White House, and called upon Congress to do the same for the rest of the nation. I commend the Oregon Legislature and Governor Kate Brown for taking action to raise their state's minimum wage. Since I first called on Congress to increase the federal minimum wage in 2013, 18 states and the District of Columbia have acted on their own. These efforts will boost the paychecks of hardworking Americans and help support millions of workers trying to make ends meet. Today, more than half of our states guarantee their workers a wage higher than the federal minimum. That's progress. But Congress needs to keep up with the rest of the country. They need to act, and finally give America a raise. And until they do, I'll continue to encourage states, cities, counties and companies to act on their own to support hardworking families. This is a great day for Oregon workers, who must be a little more excited than usual to go to work now that they know they'll be taking home much more needed income to provide for themselves and their families. The same cannot be said for most of Republican-controlled Alabama and other red states.

Republicans there recently passed a law banning counties and cities from increasing the minimum wage within their own boundaries, making clear that they have no intention of raising the minimum wage in that state for the foreseeable future. So while people in Oregon can have hope that the future will be financially brighter, people in Alabama are struck and that's why it doesn't make sense for people to vote for Republicans. Featured image via KPTV

```

],\n
{"semantic_type": "\\",
  "description": "\\",
  "column": "class",
  "properties": {
    "dtype": "number",
    "std": 0,
    "min": 0,
    "max": 1,
    "num_unique_values": 2,
    "samples": [0, 1]
  },
  "semantic_type": "\\",
  "description": "\\",
  "column": "data",
  "type": "dataframe",
  "variable_name": "data"
}

```

```

data=data.sample(frac=1)
data.head(10)

```



```

{"summary": "{\n  \"name\": \"data\", \n  \"rows\": 44878, \n  \"fields\": [\n    {\n      \"column\": \"text\", \n      \"properties\": {\n        \"dtype\": \"string\", \n        \"num_unique_values\": 38633, \n        \"samples\": [\n          \"SAN FRANCISCO (Reuters) - Shares of Amazon.com Inc (AMZN.0), Macy's Inc (M.N), Kohl's Corp (KSS.N) and other U.S. retailers rose on Friday on early signs that consumers are on track to spend more this holiday shopping season than in previous years. Although there were few signs of the frenzy that had been a hallmark of the start to the crucial U.S. shopping season in years past, known as Black Friday, industry watchers were upbeat. The turnout this morning has been relatively slow but it is still the best we have seen in three years, said Burt Flickinger, managing director of Strategic Resources Group, citing improving consumer confidence, a strong job market and healthy housing prices. We expect it to pick up as the day progresses. Adobe Analytics forecast online Black Friday sales of $5 billion, which would be a record high. Online retailers will rake in an additional $6.6 billion on Cyber Monday, according to Adobe. Amazon, the world's largest online retailer, rallied 2.6 percent to a record high, bringing its gain in 2017 to nearly 60 percent. It offered its own Black Friday deals and revealed a preview of its Cyber Monday discounts. Brick-and-mortar stores and their investors are hoping that a strong labor market and rising home prices will increase the turnout between Thursday's U.S. Thanksgiving holiday and Christmas, a period that can account for as much as 40 percent of total annual sales and make or break a retailer. [L1N1NU0GH] Wal-Mart Stores Inc (WMT.N), Macy's and others have beefed up their online sales platforms and boosted discounts for online orders in a bid to stem market share losses to Amazon. It's the big box retailers' last stand against the digital revolution, said Jake Dollarhide, Chief Executive of Longbow Asset Management in Tulsa, Oklahoma. It's their last chance to say, This is still our season. Shares of Macy's, which has suffered from falling sales for several quarters, jumped 2.1 percent, while Gap Inc (GPS.N) added 1.6 percent and Kohl's rose 1 percent. Instead of curtailing spending, consumers are coming out of their bunker, said Chad Morganlander, a portfolio manager at Washington Crossing Advisors in Florham Park, New Jersey. Nonetheless, the trend of retail preferences of the consumer is not going away. Retailers appeared to be discounting their products less than in previous years, said Thomson Reuters retail analyst Jharonne Martis after visiting a mall in New York. They are going into the holiday season more confident, knowing that consumers want their merchandise, Martis said. Not all retailers shared in Friday's holiday cheer: Target Corp (TGT.N) fell 2.8 percent, with analysts noting that it closed its stores for several hours overnight even while many rivals stayed open. Bed Bath & Beyond Inc (BBBY.0) slipped 1.9 percent. \", \n          \"WASHINGTON (Reuters) - Republicans and Democrats in Congress sparred on Tuesday over U.S. states setting rules for testing and deployment of self-driving cars and a proposal to allow automakers and technology companies to bypass existing

```

regulations in introducing autonomous cars. Democrats on a U.S. House Energy and Commerce subcommittee said that the U.S. National Highway Traffic Safety Administration (NHTSA) must play a more aggressive role in mandating self-driving car safety. A Republican draft package of 14 bills would allow NHTSA to exempt up to 100,000 vehicles per year from federal motor vehicle safety rules, which currently prevent the sale of self-driving vehicles without human controls. It would also bar states from setting self-driving rules and prevent NHTSA from preapproving self-driving car technologies. \u201cWe simply cannot have cars that stop at state lines,\u201d Representative Robert Latta said at a hearing of the subcommittee. \u201cThis isn\u2019t the government saying you have to get in a self-driving car. This is government make sure that industry can innovate.\u201d Latta said he hoped to win committee approval of a bipartisan legislative package by the end of July. General Motors Co, Alphabet Inc, Tesla Inc and others have been lobbying Congress to pre-empt rules under consideration in California and other states that could limit self-driving vehicle deployment. Representative Frank Pallone, a Democrat, said that under the Republican proposal, states would be barred from regulating self-driving car safety \u201cwithout a guarantee that NHTSA will step in\u201d to set binding rules. \u201cWe need to be sure that we get this right and that safety is the first priority,\u201d Pallone said. Democrats noted that the administration of President Donald Trump, a Republican, has not nominated a candidate to head NHTSA, which has a number of vacant senior positions. NHTSA did not send an official to testify. Two automaker trade associations said in testimony it is essential they do not face a \u201cpatchwork\u201d of self-driving state rules. They said NHTSA will have to approve exemptions. Republicans, citing competition from other countries and the rising number of traffic deaths, say it is urgent Congress approve sweeping legislation to ensure automakers and technology companies test the vehicles inside the United States. The administration of former Democratic President Barack Obama last year unveiled voluntary guidelines on self-driving cars. Trump\u2019s Transportation Secretary Elaine Chao has vowed to quickly update those. \",\n \",\n\"Since taking the oath of office, alleged president Donald Trump s approval rating is at a new low, hitting 37%, according to Gallup. Trump s disapproval rating is at jaw-dropping 58 percent. As for his approval rating, the polling company may need to start a new graph because it looks like its bottom line is 35 percent.This is the lowest approval rating of any president s first 60 days as tracked by Gallup.Trump approval drops to 37% the worst Gallup poll any president has ever had this early in their term.

pic.twitter.com/399k8tLFmx Steven Dennis (@StevenTDennis) March 19, 2017Gallup- Job \*disapproval\* upon hitting 60 days in office:Carter 9Reagan 24HW Bush 16Clinton 34W Bush 29Obama 26Trump 58 Josh Jordan (@NumbersMuncher) March 19, 2017Gallup- Job approval upon hitting 60 days in office:Carter 75Reagan 60HW Bush 56Clinton 53W Bush 58Obama 63Trump 37 Josh Jordan (@NumbersMuncher) March 19, 2017Trump is 9 points away from hitting absolute bottom of approval ratings. (There



```
def filtering(data):
    text=data.lower()
    text=re.sub('\[.*?\]', '', text)
    text=re.sub("\W", " ",text)
    text=re.sub('https?://\S+|www\.\S+', '', text)
    text=re.sub('<.*?>+', '', text)
    text=re.sub('[%s]' % re.escape(string.punctuation), '', text)
    text=re.sub('\n', '', text)
    text=re.sub('\w*\d\w*', '', text)
    return text
```

```
data['text']=data['text'].apply(filtering)
data.head(10)
```

```
{
  "summary": {
    "\n  \"name\": \"data\",
    "\n  \"rows\": 44878,
    "\n  \"fields\": [
      {
        "\n    \"column\": \"text\",
        "\n    \"properties\": {
          "\n      \"dtype\": \"string\",
          "\n      \"num_unique_values\": 38348,
          "\n      \"samples\": [
        "\n      \"the trump campaign is self destructing if things get any worse between now and the election day trump could even be bringing down congress republicans are in a panic and the only way out they see is voter suppression florida s governor rick scott saw an opportunity when hurricane matthew hit he refused to extend the registration deadline past on monday seriously why would the cutoff be a month before the election anyway a federal judge put a quick stop to that calling it irrational the deadline is extended till tuesday quite simply it is wholly irrational in this instance for florida to refuse to extend the voter registration deadline when the state already allows the governor to suspend or move the election date due to an unforeseen emergency u s district judge mark walker wrote in a page order if aspiring eligible florida voters are barred from registering to vote then those voters are stripped of one of our most precious freedoms source tampabay commore than that walker called the state s effort to block the vote unconstitutional the right to vote is a precious and fundamental right walker wrote quoting from an earlier case it s expected that about additional people will be registering between now and the deadline this is especially bad for republicans clinton is leading the race in florida by a narrow three points but between his offensive remarks toward women and the fact that it was revealed that trump illegally did business with cuba his florida support is quickly fading without florida trump is almost assured of losing while clinton could still win the election while losing florida those people might represent about one percent of the florida electorate which might not sound like a lot but in a race that s that close in a perennial swing state that could mean the difference between winning and losing featured image via joe readle getty images \",\n    \"a nervous nancy pelosi responded
```

thursday to criticism from democratic colleagues asking her to step down from her leadership post and president donald trump s subsequent tweet mocking her for helping republicans politically some republican members have said that it would be good for their party if pelosi remains the top democrat in the house these remarks followed heavy criticism from democratic lawmakers of pelosi s leadership following tuesday s special election losses in georgia and south carolina many within the democratic party are calling for new leadership in other words nancy needs to go asap president trump went on twitter to mockingly signal his support for the pelosi conservatives like former speaker newt gingrich have been saying they hope nancy pelosi stays on as minority leader of the house she s good for the republican party she s definitely on the hot seat right now but in true pelosi fashion she s oblivious to the reality that it s time to go she even said she s a master legislator um no check out the transcript of her comments at the press conference so you want me to sing my praises is that what you re saying why should i well i m a uh um master legislator i am a uh strategic politically astute leader i am a uh uh my uh uh my leadership is recognized by many around the country and that is why i m able to attract the support that i do which is essential to our elections sad to say i m very pleased at the cooperation we re doing working with all the um social media and small donor community to change how we communicate but also how we attract resources intellectual and financial uh to the party i have experience in winning the congress when people said to us in you don t have a chance be ready for a uh permanent republican majority i said harry reid and i said we don t accept that so we proceeded we took the president from to president bush won the election but the fact is they will always make a target senator reid was a target senator daschle was a target tip o neill was a target i am a target and they always want to choose our leaders and usually they go after the most effective leaders because they want to take us diminish us uh the opportunity that we have we have a democratic caucus where members participate in the decisions and right now the members are putting together our messaging as we go forward i could have written something down on the page and said this is what i think but we don t do things that way we listen to members we re very proud of our uh policy and communications committee yikes

\",\n
 \"washington reuters president donald trump spoke by phone on friday to mexican president enrique pena nieto a white house official said amid a simmering war of words over trump s plan to build a border wall the official said the two leaders spoke for about an hour

```

    ],\n
    \"semantic_type\": \"\",
    \"description\": \"\"
  },\n
  {\n
    \"column\":
    \"class\",
    \"properties\": {\n
      \"dtype\": \"number\",
      \"std\": 0,
      \"min\": 0,
      \"max\": 1,
      \"num_unique_values\": 2,
      \"samples\": [\n
        0,\n
        1\n
      ],\n
      \"semantic_type\": \"\",
  
```



```

\ "description\ ": \ "\n      }\n      }\n  ]\n  }\n", "type": "dataframe", "variable_name": "data"}

x=data['text']
y=data['class']

x_train,x_test,y_train,y_test=ttp(x,y,test_size=0.25,random_state=0)

from sklearn.feature_extraction.text import TfidfVectorizer

vectorization = TfidfVectorizer()
xv_train = vectorization.fit_transform(x_train)
xv_test = vectorization.transform(x_test)

from sklearn.linear_model import LogisticRegression

LR = LogisticRegression()
LR.fit(xv_train,y_train)

LogisticRegression()

pred_lr=LR.predict(xv_test)

LR.score(xv_test, y_test)

print(classification_report(y_test,pred_lr))

```

	precision	recall	f1-score	support
0	0.99	0.99	0.99	5779
1	0.99	0.99	0.99	5441
accuracy			0.99	11220
macro avg	0.99	0.99	0.99	11220
weighted avg	0.99	0.99	0.99	11220

```

def predict_news(text):
    text_vectorized = vectorization.transform([filtering(text)])
    prediction = LR.predict(text_vectorized)
    if prediction == 1:
        return "This news is likely true."
    else:
        return "This news is likely fake."

user_input = input("Enter news text: ")
result = predict_news(user_input)
print(result)

```

Enter news text: WASHINGTON (Reuters) - The head of a conservative Republican faction in the U.S.  
This news is likely true.

```
from sklearn.tree import DecisionTreeClassifier
```

```
DT = DecisionTreeClassifier()
```

```
DT.fit(xv_train, y_train)
```

```
DecisionTreeClassifier()
```

```
DecisionTreeClassifier()
```

```
DecisionTreeClassifier()
```

```
pred_dt = DT.predict(xv_test)
```

```
DT.score(xv_test, y_test)
```

```
0.996524064171123
```

```
print (classification_report(y_test, pred_lr))
```

	precision	recall	f1-score	support
0	0.99	0.99	0.99	5779
1	0.99	0.99	0.99	5441
accuracy			0.99	11220
macro avg	0.99	0.99	0.99	11220
weighted avg	0.99	0.99	0.99	11220

```
def predict_news(text):
```

```
    text_vectorized = vectorization.transform([filtering(text)])
```

```
    prediction = DT.predict(text_vectorized)
```

```
    if prediction == 1:
```

```
        return "This news is likely true."
```

```
    else:
```

```
        return "This news is likely fake."
```

```
user_input = input("Enter news text: ")
```

```
result = predict_news(user_input)
```

```
print(result)
```

```
Enter news text: WASHINGTON (Reuters) - The head of a conservative  
Republican faction in the U.S.
```

```
This news is likely true.
```

```
from sklearn.ensemble import RandomForestClassifier
```

```
RF = RandomForestClassifier(random_state = 0)
```

```
RF.fit(xv_train, y_train)
```

```
RandomForestClassifier(random_state=0)
```

```
RandomForestClassifier(random_state=0)
```

```
RandomForestClassifier(random_state=0)
```

```
pred_rf = RF.predict(xv_test)
```

```
RF.score(xv_test, y_test)
```

```
0.989572192513369
```

```
print (classification_report(y_test, pred_rf))
```

	precision	recall	f1-score	support
0	0.99	0.99	0.99	5779
1	0.99	0.99	0.99	5441
accuracy			0.99	11220
macro avg	0.99	0.99	0.99	11220
weighted avg	0.99	0.99	0.99	11220

```
def predict_news(text):  
    text_vectorized = vectorization.transform([filtering(text)])  
    prediction = RF.predict(text_vectorized)  
    if prediction == 1:  
        return "This news is likely true."  
    else:  
        return "This news is likely fake."
```

```
user_input = input("Enter news text: ")  
result = predict_news(user_input)  
print(result)
```

```
Enter news text: WASHINGTON (Reuters) - The head of a conservative  
Republican faction in the U.S.  
This news is likely true.
```