In [1]:
```
import numpy as np
import pandas as pd
```

In [2]:
```
df=pd.read_csv(r"C:\Users\shara\OneDrive\Desktop\stress.csv")
df.head()
```

Out[2]:

	subreddit	post_id	sentence_range	text	id	label	confidence	social_timestamp	social_karma
0	ptsd	8601tu	(15, 20)	He said he had not felt that way before, sugge...	33181	1	0.8	1521614353	5
1	assistance	8lbrx9	(0, 5)	Hey there r/assistance, Not sure if this is th...	2606	0	1.0	1527009817	4
2	ptsd	9ch1zh	(15, 20)	My mom then hit me with the newspaper and it s...	38816	1	0.8	1535935605	2
3	relationships	7rorpp	[5, 10]	until i met my new boyfriend, he is amazing, h...	239	1	0.6	1516429555	0
4	survivorsofabuse	9p2gbc	[0, 5]	October is Domestic Violence Awareness Month a...	1421	1	0.8	1539809005	24

5 rows × 116 columns

In [3]:
```
df.describe()
```

Out[3]:

	id	label	confidence	social_timestamp	social_karma	syntax_ari	lex_liwc_WC	lex_liwc
count	2838.000000	2838.000000	2838.000000	2.838000e+03	2838.000000	2838.000000	2838.000000	28
mean	13751.999295	0.524313	0.808972	1.518107e+09	18.262156	4.684272	85.996124	
std	17340.161897	0.499497	0.177038	1.552209e+07	79.419166	3.316435	32.334887	
min	4.000000	0.000000	0.428571	1.483274e+09	0.000000	-6.620000	5.000000	
25%	926.250000	0.000000	0.600000	1.509698e+09	2.000000	2.464243	65.000000	
50%	1891.500000	1.000000	0.800000	1.517066e+09	5.000000	4.321886	81.000000	
75%	25473.750000	1.000000	1.000000	1.530898e+09	10.000000	6.505657	101.000000	
max	55757.000000	1.000000	1.000000	1.542592e+09	1435.000000	24.074231	310.000000	

8 rows × 112 columns

In [4]:
```
df.isnull()
```

Out[4]:

	subreddit	post_id	sentence_range	text	id	label	confidence	social_timestamp	social_karma	syntax_
0	False	False	False	False	False	False	False	False	False	Fa
1	False	False	False	False	False	False	False	False	False	Fa
2	False	False	False	False	False	False	False	False	False	Fa
3	False	False	False	False	False	False	False	False	False	Fa
4	False	False	False	False	False	False	False	False	False	Fa
...	...	...	...	...	...	...	...	...	...	
2833	False	False	False	False	False	False	False	False	False	Fa
2834	False	False	False	False	False	False	False	False	False	Fa
2835	False	False	False	False	False	False	False	False	False	Fa
2836	False	False	False	False	False	False	False	False	False	Fa
2837	False	False	False	False	False	False	False	False	False	Fa

2838 rows × 116 columns

In [5]:
```
df.isnull().sum()
```

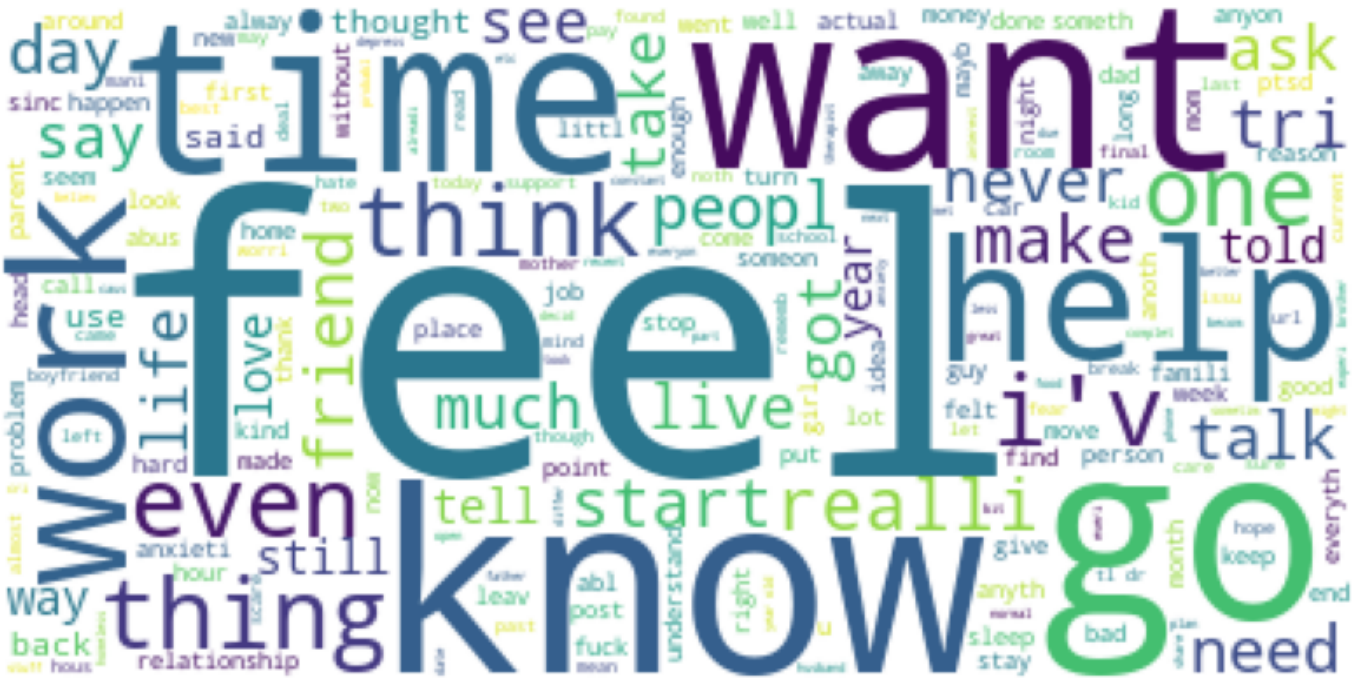
Out[5]:
```
subreddit                    0
post_id                      0
sentence_range               0
text                         0
id                           0
                           ..
lex_dal_avg_pleasantness     0
social_upvote_ratio          0
social_num_comments          0
syntax_fk_grade              0
sentiment                    0
Length: 116, dtype: int64
```

In [6]:
```
import nltk
import re
from nltk. corpus import stopwords
import string
nltk. download( 'stopwords' )
stemmer = nltk. SnowballStemmer("english")
stopword=set (stopwords . words ( 'english' ))

def clean(text):
    text = str(text) . lower()
    text = re. sub('\[.*?\]',' ',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)
    text = [word for word in text. split(' ') if word not in stopword]
    text =" ". join(text)
    text = [stemmer . stem(word) for word in text. split(' ') ]
    text = " ". join(text)
    return text
df [ "text"] = df["text"]. apply(clean)
```

```
[nltk_data] Downloading package stopwords to
[nltk_data]     C:\Users\shara\AppData\Roaming\nltk_data...
[nltk_data]   Package stopwords is already up-to-date!
```

In [7]:
```
import matplotlib. pyplot as plt
from wordcloud import WordCloud, STOPWORDS, ImageColorGenerator
text = " ". join(i for i in df. text)
stopwords = set (STOPWORDS)
wordcloud = WordCloud( stopwords=stopwords,background_color="white") . generate(text)
plt. figure(figsize=(10, 10) )
plt. imshow(wordcloud )
plt. axis("off")
plt. show( )
```



In [8]:
```
from sklearn. feature_extraction. text import CountVectorizer
from sklearn. model_selection import train_test_split

x = np.array (df["text"])
y = np.array (df["label"])

cv = CountVectorizer ()
X = cv. fit_transform(x)
print(X)
xtrain, xtest, ytrain, ytest = train_test_split(X, y,test_size=0.33)
```

```
  (0, 7405)     1
  (0, 3278)     1
  (0, 9454)     1
  (0, 861)      1
  (0, 8359)     1
  (0, 3750)     1
  (0, 7214)     1
  (0, 8908)     1
  (0, 298)      1
  (0, 9749)     1
  (0, 4303)     1
  (0, 5034)     1
  (0, 5325)     1
  (0, 2188)     1
  (0, 5118)     1
  (0, 3265)     1
  (0, 2593)     3
  (0, 4188)     1
  (0, 5316)     1
  (0, 3697)     1
  (0, 8339)     1
```

```
  (0, 6861)     1
  (0, 4150)     1
  (0, 5174)     1
  (0, 1831)     1
  :     :
  (2836, 877)   1
  (2836, 4555)  1
  (2836, 2928)  1
  (2836, 4615)  1
  (2836, 4785)  1
  (2836, 4511)  1
  (2837, 7405)  2
  (2837, 3018)  1
  (2837, 5533)  2
  (2837, 8784)  1
  (2837, 8502)  1
  (2837, 6770)  1
  (2837, 4318)  1
  (2837, 9670)  1
  (2837, 5569)  1
  (2837, 8881)  1
  (2837, 5713)  1
  (2837, 2587)  1
  (2837, 7468)  1
  (2837, 2351)  1
  (2837, 7804)  1
  (2837, 2758)  1
  (2837, 8880)  1
  (2837, 5459)  1
  (2837, 3020)  1
```

In [9]:
```
from sklearn.naive_bayes import BernoulliNB
model=BernoulliNB()
model.fit(xtrain,ytrain)
```

Out[9]:
```
▾ BernoulliNB
BernoulliNB()
```

In [10]:
```
user=input("Enter the text")
data=cv.transform([user]).toarray()
output=model.predict(data)
print(output)
```

```
Enter the texti feeling so sad
[1]
```

In [ ]:

In [ ]:

In [ ]: