

CREATE A CHAT BOT USING PYTHON

Importing of necessary libraries:

```
import numpy as np
import string
from sklearn.feature_extraction.text import CountVectorizer, TfidfTransformer
from sklearn.tree import DecisionTreeClassifier
from sklearn.pipeline import Pipeline
import pandas as pd
```

Create a pipeline using sklearn:

```
Pipe = Pipeline([
    ('bow', CountVectorizer(analyzer=simple_cleaner)),
    ('tfidf', TfidfTransformer()),
    ('classifier', DecisionTreeClassifier())
])

Pipe.fit(df['Questions'], df['Answers'])
```

```
def get_response(input_text):
    response = Pipe.predict([input_text])[0]
    return response
```

Main function:

```
while True:
    user_input = input("User :")
    response = get_response(user_input)
    if user_input=="bye":
        print("Bot: Thank You")
        break
    print(f"Bot: {response}")
```