**Code**

import nltk

from nltk import word\_tokenize

from nltk import bigrams, trigrams

test\_list = ['Hi','How are you?','I am from VESIT', 'Nice to meet you']

count=0

new\_list=[]

for i in test\_list:

if count==0:

i="(eos) "+i+" (eos)"

else:

i=i+" (eos)"

new\_list.append(i)

count+=1

word\_list=[]

for i in new\_list:

x=i.split()

word\_list.extend(x)

res = [(x, i.split()[j + 1]) for i in new\_list

for j, x in enumerate(i.split()) if j < len(i.split()) - 1]

text="Hello How are you? We are from VESIT Nice to meet you"

print("Orignal Text->",text)

unigrams = word\_tokenize(text)

print("<--Unigrams-->")

print(unigrams)

bigrms=nltk.bigrams(text.split())

print ("<--Bigrams-->")

print(\*map(' '.join, bigrms), sep=', ')

trigrms =nltk.trigrams(text.split())

print( "<--Trigrams-->")

print(\*map(' '.join, trigrms), sep=', ')

print()

print("<--Before applying Smoothing Probability Table-->")

def prob\_calc(a,b):

prob=(res.count((b,a))+1)/(word\_list.count(b)+len(set(word\_list)))

return prob

wordset=list(set(word\_list))

print("\t",end="")

for i in wordset:

print(" ",i, end="")

print()

for i in wordset:

print(i,":\t", end="")

for j in wordset:

ans=prob\_calc(j,i)

print("%.3f "%ans,end="")

print()

print()

print("<--After applying Smoothing Probability Table-->")

def prob\_calc(a,b):

prob=(res.count((b,a))+1)/(word\_list.count(b)+len(set(word\_list))+1)

return prob

wordset=list(set(word\_list))

print("\t",end="")

for i in wordset:

print(" ",i, end="")

print()

for i in wordset:

print(i,":\t", end="")

for j in wordset:

ans=prob\_calc(j,i)

print("%.3f "%ans,end="")

print()

**Output**

