AI Interview / assignment questions
Part A: MCQ

Answers:

1. B
2. B
3. B
4. D
5. C
6. C
7. A
8. D
9. D
10. C
11. A
12. D
13. C
14. A
15. C
16. D
17. A
18. C
19. C
20. D
21. B
22. B
23. C
24. D
25. A

Part B: Fill in the blanks with correct option:

Answers :

1. **Decrease**
2. **Non-linear, regression, decrease**
3. **Classification**
4. **Testing, Training**
5. **-1 to 256**

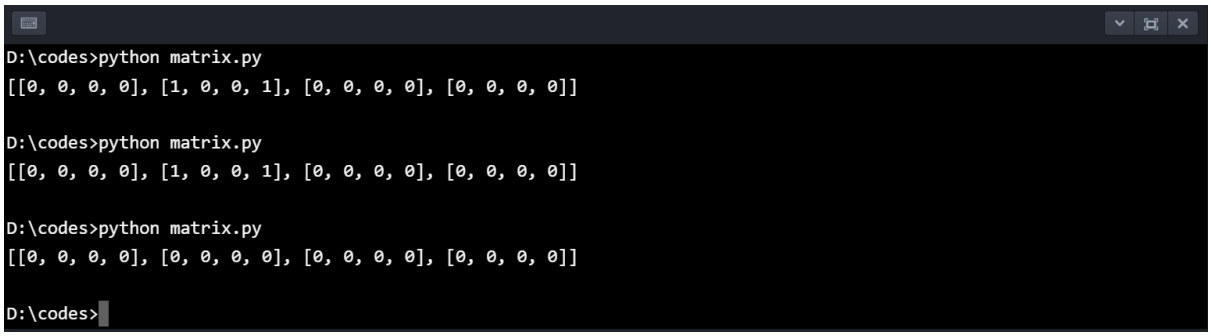
Part C: Long Questions :

Q1.

```
from nltk.tokenize import word_tokenize
from string import punctuation
import nltk
from nltk.corpus import stopwords
from nltk.stem import SnowballStemmer
from nltk.stem import WordNetLemmatizer
```

```
text = "Steve was born in Tokyo, Japan in 1950. He moved to London with his
parents when he was 5 years old. Steve started school there and his father began
work at the hospital.His mother was a house wife and he had four brothers.He lived
in England for 2 years then moved to Amman, Jordan where he lived there for 10
years. Steve then moved to Cyprus to study at the Mediterranean University.
Unfortunately, he did not succeed and returned to Jordan. His parents were very
unhappy so he decided to try in America.He applied to many colleges and
universities in the States and finally got some acceptance offers from them. He
chose Wichita State University in Kansas. His major was Bio-medical Engineering.
He stayed there for bout six months and then he moved again to a very small town
called Greensboro to study in a small college."
Lower_one(text)
Punctuation_two(text)
Stopword_three(text)
Stemming_four(text)
Lemattize_five(text)
Whitespaces_six(text)


def Punctuation_two (t):
    print(''.join(s for s in t if s not in punctuation))


def do_stemming(text):
    stopword = stopwords.words('english')
    snowball_stemmer = SnowballStemmer('english')
    tokens = nltk.word_tokenize(text)
    word = [snowball_stemmer.stem(word) for word in tokens]
    print (word)
def Stopword_three (text):
    stopword = stopwords.words('english')
    tokens = nltk.word_tokenize(text)
    stopwords = [word for word in tokens if word not in stopword]
    print (stopwords)


def Lemattize_five (text):
    stopword = stopwords.words('english')
    lemmatizer = WordNetLemmatizer()
    word_tokens = nltk.word_tokenize(text)
    lemmatized = [lemmatizer.lemmatize(word) for word in word_tokens]
    print (lemmatized)
def Whitespaces_six (text):
    print(text.replace(" ",""))


def Lower_one (text):
    print(' '.join([w.lower() for w in word_tokenize(text)]))


Q2.




Q3.
Solution:

def convert(mat_value):
```

```
        coloumn = False
        row = len(mat_value)
        col = len(mat_value[0])
        for i in range(row):
            if mat_value[i][0] == 0:
                coloumn = True
            for j in range(1, col):
                if mat_value[i][j]  == 0:
                    mat_value[0][j] = 0
                    mat_value[i][0] = 0

        for i in range(1, row):
            for j in range(1, col):
                if not mat_value[i][0] or not mat_value[0][j]:
                    mat_value[i][j] = 0


        if mat_value[0][0] == 0:
            for j in range(col):
                mat_value[0][j] = 0
        if coloumn:
            for i in range(row):
                mat_value[i][0] = 0
        print(mat_value)
mat_value = [[1,1,0,1],[1,0,0,0],[1,1,0,1],[1,0,1,1]]
convert(mat_value)
```



Terminal Snapshot for different test cases (Only answers are printed).