COLLECTION OF AI LAB EXPERIMENTS

A COURSE REPORT
By

Abhinav Ranjan
RA1911003010003
CSE A1 SECTION
6th Sem
B.Tech CSE

Under the guidance of

Dr. B.Baranidharan
In partial fulfilment for the Course

of
18CSC305J - Artificial Intelligence

FACULTY OF ENGINEERING AND

TECHNOLOGY SRM INSTITUTE OF

SCIENCE AND TECHNOLOGY

Kattankulathur,

Chengalpattu

District APRIL 2022

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Under Section 3 of UGC Act, 1956)
BONAFIDE CERTIFICATE

Certified that this report

"AI LAB EXPERIMENTS RECORD"

is the Bonafide work of **Abhinav Ranjan**

who carried out the experiments under my supervision.

SIGNATURE   **SIGNATURE**

Dr.B.Baranidharan
Designation   **Course Coordinator**
Department   **Associate Professor,**
SRM IST , SRM Nagar   SRM IST , SRM Nagar
Potheri , Kattankulathur   Potheri , Kattankulathur
Tamil Nadu 603203   Tamil Nadu 603203

ACKNOWLEDGEMENT

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EXP NO   EXPERIMENT NAME

ABHINAV RANJAN
RA1911003010003
CSE A1 SECTION
SRMIST , KTR

AI LAB EXP 1 - TOY PROBLEMS

(PYTHON)

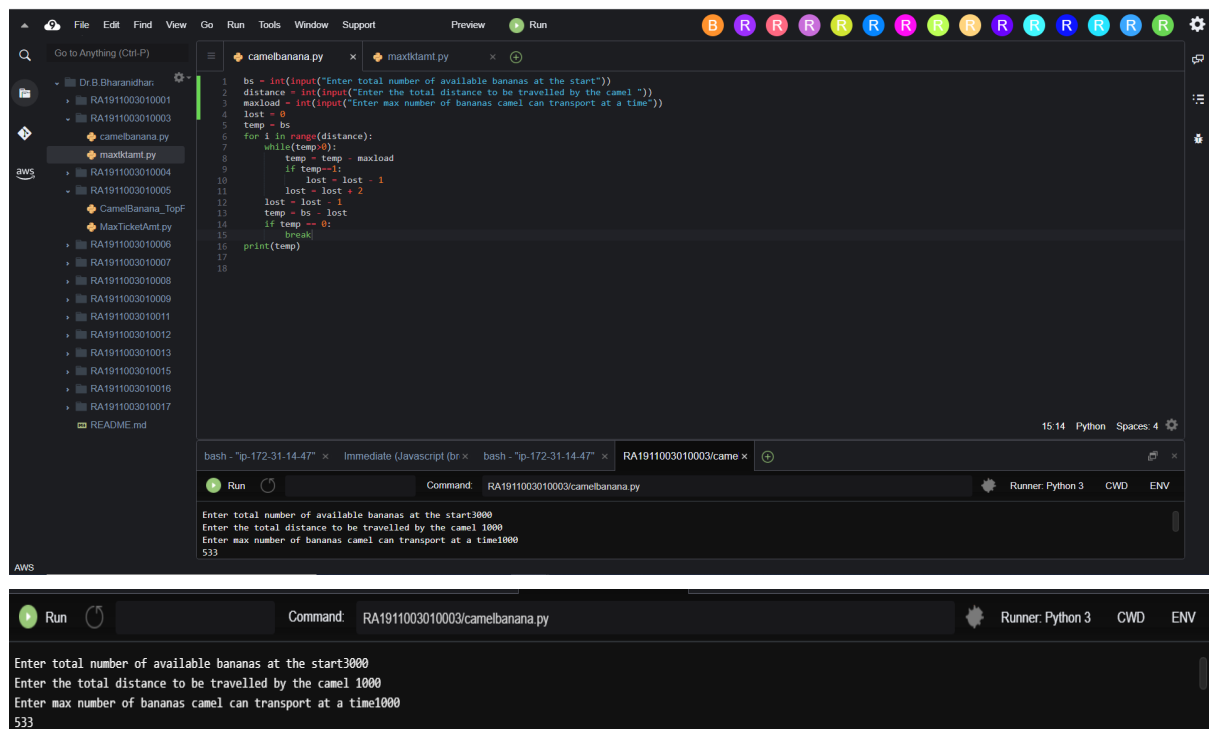## 1. CAMEL AND BANANA

PROBLEM STATEMENT
A person wants to transfer bananas over to a destination A km away. He initially has B bananas and a camel. The camel cannot carry more than C bananas at a time and eats a banana every km it travels. Given three integers A, B, and C, the task is to find the maximum number of bananas the person can transfer to the destination using the camel.

TOOLS USED - python3 , AWS

CODE :
```python
bs = int(input("Enter total number of available bananas at the start"))
distance = int(input("Enter the total distance to be travelled by the camel "))
maxload = int(input("Enter max number of bananas camel can transport at a time"))
lost = 0
temp = bs
for i in range(distance):
    while(temp>0):
        temp = temp - maxload
        if temp==1:
            lost = lost - 1
        lost = lost + 2
    lost = lost - 1
    temp = bs - lost
    if temp == 0:
        break
print(temp)
```

2. MAXIMISING TICKET AMOUNT

PROBLEM STATEMENT :
Given array seats[] where seat[i] is the number of vacant seats in the ith row in a stadium for a cricket match. There are N people in a queue waiting to buy the tickets. Each seat costs equal to the number of vacant seats in the row it belongs to. The task is to maximise the profit by selling the tickets to N people.

TOOLS - python3 , AWS

CODE :
```
m = int(input("Enter number of people standing in queue"))
n = int(input("Enter number of rows which are vacant"))
totalearning = 0
list = []
for i in range(0,n):
    ele = int(input())
```

```
        list.append(ele)
for i in range(0,m):
    list.sort(reverse=True)
    totalearning = totalearning + list[0]
    list[0]=list[0]-1
    list.sort(reverse=True)
    if(list[0]<=0):
        break
print("Thus the total number of money earned by maximising ticket amount is ")
print(totalearning)
```

SCREENSHOTS: