

INTERNSHIP REPORT
ON
PYTHON COMPITATIVE CODEING

A internship Report is submitted
In accordance with requirement of degree of

BACHELOR OF TECHNOLOGY
IN
Computer science and information technology

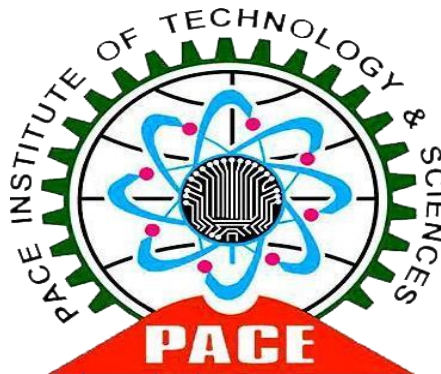
Submitted by

G.Surekha

21kqla0705

Under the Mentorship of

M.SRAVAN KUMAR



DEPARTMENT OF Computer science and information technology

PACE INSTITUTE OF TECNOLOGY AND SCIENCES
(AUTONOMOUS)

(Affiliated to Jawaharlal Nehru Technological University Kakinada, Kakinada &

Accredited by NAAC 'A' GRADE, An ISO 9001-2015 Certified Institution)

NH-16, Valluru Post , Prakasam District, A.P-523272.

CAMPUS CHOICE PREDICTOR

DESCRIPTION

Campus choice for students based on the branches and placements, every student will be think about for our future. we can take few colleges data and check the analysis like branches, placements, percentage, facility....

Requirements:

INPUT:

1. College name
2. List of Branches in college
3. No. of placements
4. Pass percentage
5. Distance
6. Status
7. Transport

OUTPUT:

1. Details of particular college
2. College name with placements greater than 500
3. Transport available college names
4. No. of autonomous colleges
5. Branches of particular college
6. College that are less distance
7. college names with pass percentage greater than 60
8. Which college has max placements

FUNCTIONS:

Conditions,Lists,Sets,Dictionary,max(),pandas

APPROACH:

1. User Input: The code allows users to enter information for a specified number of colleges. College details include name, branches (as a list), placements, percentage, distance, status (autonomous/non-autonomous), and transport availability.
2. Data Storage and Display: It stores the entered data in a list of dictionaries (l). The code displays the college details in a tabular format.
3. DataFrame Creation: It creates a Pandas DataFrame (df) from the list l.
4. College Search: It allows users to search for a specific college by name and displays its details.
5. Filtering: It can filter colleges based on: Placements greater than 500
Transport availability ("yes") Percentage greater than 60 Autonomous status ("autonomous")

source code:

```
project.py - C:\Users\Dwaraka\AppData\Local\Programs\Python\Python312\project.py (3.12.4)
File Edit Format Run Options Window Help

import pandas as pd
l=[]
def college(s,a,p,per,km,st,bf):
    campus={
        'college':s,
        'Branch':a,
        'Placements':p,
        'Percentage':per,
        'Distance':km,
        'Status':st,
        'Transport':bf
    }
    l.append(campus)

n=int(input("No.of colleges: "))
for i in range(1,n+1):
    s=input("Name of the college: ")
    a=list(input("List of branches: ").split())
    p=int(input("No.of placements: "))
    per=float(input("Pass percentage: "))
    km=int(input("Distance: "))
    st=input("Status: ")
    bf=input("Transport: ")
    college(s,a,p,per,km,st,bf)
print('college\tBranch\tPlacements\tPercentage\tDistance\tStatus\tTransport\t')
for i in range(n):
    print(l[i])
df=pd.DataFrame(l)
print(df)
k=input()
for i in range(n):
    if l[i]['college']==k:
        print("Details of college: ")
        print(l[i]['college'],l[i]['Branch'],l[i]['Placements'],l[i]['Percentage'],l[i]['Distance'],l[i]['Status'],l[i]['Transport'])
for i in range(n):
    if l[i]['Placements']>500:
        print('Placements greater than 500: ',l[i]['college'])
g=input()
for i in range(n):
    if l[i]['college']==g:
        print('Branches: ',l[i]['Branch'])
for i in range(n):
```

```

for i in range(n):
    if l[i]['Transport']=='yes':
        print('Transport available college: ',l[i]['college'])
for i in range(n):
    if l[i]['Percentage']>60:
        print('percentage of college: ',l[i]['college'])
v=0
for i in range(n):
    if l[i]['Status']=='autonomous':
        v=v+1
        print('Autonomous college: ',l[i]['college'])
print('count:', v)
c=[]
for i in range(n):
    c.append(l[i]['Placements'])
mx=max(c)
for i in range(n):
    if l[i]['Placements']==mx:
        print('Max Placements of college: ',mx,l[i]['college'])
d=[]
for i in range(n):
    d.append(l[i]['Distance'])
mn=min(d)
for i in range(n):
    if l[i]['Distance']==mn:
        print('Min Placements of college: ',mn,l[i]['college'])

```

Output:

IDLE Shell 3.12.4

File Edit Shell Debug Options Window Help

Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

```

>>>
= RESTART: C:\Users\Dwaraka\AppData\Local\Programs\Python\Python312\project.py
No.of colleges: 20
Name of the college: ab
List of branches: cse it iot
No.of placements: 500
Pass percentage: 60
Distance: 100
Status: autonomous
Transport: yes
Name of the college: cd
List of branches: csit aims aids
No.of placements: 600
Pass percentage: 70
Distance: 150
Status: jntuk
Transport: no
Name of the college: ef
List of branches: aids aaiml mech
No.of placements: 400
Pass percentage: 60
Distance: 200
Status: autonomous
Transport: no
Name of the college: gh
List of branches: csit iot mech
No.of placements: 600
Pass percentage: 70
Distance: 250
Status: jntuk
Transport: yes
Name of the college: ij
List of branches: aids civil iot
No.of placements: 550
Pass percentage: 69
Distance: 250
Status: jntuk
Transport: no

```

```
*IDLE Shell 3.12.4*
File Edit Shell Debug Options Window Help
Name of the college: kl
List of branches: cse it iot
No.of placements: 450
Pass percentage: 70
Distance: 200
Status: autonomous
Transport: no
Name of the college: mn
List of branches: aids aiml iot
No.of placements: 550
Pass percentage: 69
Distance: 250
Status: jntuk
Transport: yes
Name of the college: op
List of branches: civil mech iot
No.of placements: 600
Pass percentage: 59
Distance: 300
Status: autonomous
Transport: yes
Name of the college: qr
List of branches: mech cse it
No.of placements: 600
Pass percentage: 50
Distance: 150
Status: jntuk
Transport: no
Name of the college: st
List of branches: csit iot it
No.of placements: 600
Pass percentage: 70
Distance: 150
Status: jntuk
Transport: yes
Name of the college: uv
List of branches: cse it aids
No.of placements: 470
Pass percentage: 65
Distance: 100
Status: autonomous
Transport: no
```

```
*IDLE Shell 3.12.4*
File Edit Shell Debug Options Window Help
Name of the college: wx
List of branches: csit aiml aids
No.of placements: 470
Pass percentage: 55
Distance: 120
Status: jntuk
Transport: no
Name of the college: yz
List of branches: aiml aids civil
No.of placements: 660
Pass percentage: 54
Distance: 120
Status: autonomous
Transport: yes
Name of the college: pace
List of branches: cse it csit
No.of placements: 66
Pass percentage: 77
Distance: 130
Status: jntuk
Transport: yes
Name of the college: qis
List of branches: it civil mech
No.of placements: 670
Pass percentage: 68
Distance: 130
Status: autonomous
Transport: no
Name of the college: rise
List of branches: csit civil mech
No.of placements: 490
Pass percentage: 64
Distance: 130
Status: autonomous
Transport: no
Name of the college: prakasam
List of branches: civil aids aiml
No.of placements: 660
Pass percentage: 62
Distance: 250
Status: jntuk
Transport: yes
```

```
*IDLE Shell 3.12.4*
File Edit Shell Debug Options Window Help

Name of the college: zx
List of branches: csit cse iot
No.of placements: 370
Pass percentage: 78
Distance: 350
Status: autonomous
Transport: no
Name of the college: civil
List of branches: cse it iot
No.of placements: 590
Pass percentage: 79
Distance: 140
Status: jntuk
Transport: no
Name of the college: mech
List of branches: civil csit iot
No.of placements: 500
Pass percentage: 60
Distance: 200
Status: jntuk
Transport: no

college Branch Placements Percentage Distance Status Transport
{'college': 'ab', 'Branch': ['cse', 'it', 'iot'], 'Placements': 500, 'Percentage': 60.0, 'Distance': 100, 'Status': 'autonomous', 'Transport': 'yes'}
{'college': 'cd', 'Branch': ['csit', 'aims', 'aids'], 'Placements': 600, 'Percentage': 70.0, 'Distance': 150, 'Status': 'jntuk', 'Transport': 'no'}
{'college': 'ef', 'Branch': ['aids', 'aiml', 'mech'], 'Placements': 400, 'Percentage': 60.0, 'Distance': 200, 'Status': 'autonomous', 'Transport': 'no'}
{'college': 'gh', 'Branch': ['csit', 'iot', 'mech'], 'Placements': 600, 'Percentage': 70.0, 'Distance': 250, 'Status': 'jntuk', 'Transport': 'yes'}
{'college': 'ij', 'Branch': ['aids', 'civil', 'iot'], 'Placements': 550, 'Percentage': 69.0, 'Distance': 250, 'Status': 'jntuk', 'Transport': 'no'}
{'college': 'kl', 'Branch': ['cse', 'it', 'iot'], 'Placements': 450, 'Percentage': 70.0, 'Distance': 200, 'Status': 'autonomous', 'Transport': 'no'}
{'college': 'mn', 'Branch': ['aids', 'aiml', 'iot'], 'Placements': 550, 'Percentage': 69.0, 'Distance': 250, 'Status': 'jntuk', 'Transport': 'yes'}
{'college': 'op', 'Branch': ['civil', 'mech', 'iot'], 'Placements': 600, 'Percentage': 59.0, 'Distance': 300, 'Status': 'autonomous', 'Transport': 'yes'}
{'college': 'qr', 'Branch': ['mech', 'cse', 'it'], 'Placements': 600, 'Percentage': 50.0, 'Distance': 150, 'Status': 'jntuk', 'Transport': 'no'}
{'college': 'st', 'Branch': ['csit', 'iot', 'it'], 'Placements': 600, 'Percentage': 70.0, 'Distance': 150, 'Status': 'jntuk', 'Transport': 'yes'}
{'college': 'uv', 'Branch': ['cse', 'it', 'aids'], 'Placements': 470, 'Percentage': 65.0, 'Distance': 100, 'Status': 'autonomous', 'Transport': 'no'}
{'college': 'wx', 'Branch': ['csit', 'aiml', 'aids'], 'Placements': 470, 'Percentage': 55.0, 'Distance': 120, 'Status': 'jntuk', 'Transport': 'no'}
{'college': 'yz', 'Branch': ['aiml', 'aids', 'civil'], 'Placements': 660, 'Percentage': 54.0, 'Distance': 120, 'Status': 'autonomous', 'Transport': 'yes'}
}
{'college': 'pace', 'Branch': ['cse', 'it', 'csit'], 'Placements': 66, 'Percentage': 77.0, 'Distance': 130, 'Status': 'jntuk', 'Transport': 'yes'}
{'college': 'qis', 'Branch': ['it', 'civil', 'mech'], 'Placements': 670, 'Percentage': 68.0, 'Distance': 130, 'Status': 'autonomous', 'Transport': 'no'}
{'college': 'rise', 'Branch': ['csit', 'civil', 'mech'], 'Placements': 490, 'Percentage': 64.0, 'Distance': 130, 'Status': 'autonomous', 'Transport': 'no'}
}
{'college': 'prakasam', 'Branch': ['civil', 'aids', 'aiml'], 'Placements': 660, 'Percentage': 62.0, 'Distance': 250, 'Status': 'jntuk', 'Transport': 'yes'}
}
```

```
*IDLE Shell 3.12.4*
File Edit Shell Debug Options Window Help

{'college': 'zx', 'Branch': ['csit', 'cse', 'iot'], 'Placements': 370, 'Percentage': 78.0, 'Distance': 350, 'Status': 'autonomous', 'Transport': 'no'}
{'college': 'civil', 'Branch': ['cse', 'it', 'iot'], 'Placements': 590, 'Percentage': 79.0, 'Distance': 140, 'Status': 'jntuk', 'Transport': 'no'}
{'college': 'mech', 'Branch': ['civil', 'csit', 'iot'], 'Placements': 500, 'Percentage': 60.0, 'Distance': 200, 'Status': 'jntuk', 'Transport': 'no'}

college Branch Placements ... Distance Status Transport
0 ab [cse, it, iot] 500 ... 100 autonomous yes
1 cd [csit, aims, aids] 600 ... 150 jntuk no
2 ef [aids, aiml, mech] 400 ... 200 autonomous no
3 gh [csit, iot, mech] 600 ... 250 jntuk yes
4 ij [aids, civil, iot] 550 ... 250 jntuk no
5 kl [cse, it, iot] 450 ... 200 autonomous no
6 mn [aids, aiml, iot] 550 ... 250 jntuk yes
7 op [civil, mech, iot] 600 ... 300 autonomous yes
8 qr [mech, cse, it] 600 ... 150 jntuk no
9 st [csit, iot, it] 600 ... 150 jntuk yes
10 uv [cse, it, aids] 470 ... 100 autonomous no
11 wx [csit, aiml, aids] 470 ... 120 jntuk no
12 yz [aiml, aids, civil] 660 ... 120 autonomous yes
13 pace [cse, it, csit] 66 ... 130 jntuk yes
14 qis [it, civil, mech] 670 ... 130 autonomous no
15 rise [csit, civil, mech] 490 ... 130 autonomous no
16 prakasam [civil, aids, aiml] 660 ... 250 jntuk yes
17 zx [csit, cse, iot] 370 ... 350 autonomous no
18 civil [cse, it, iot] 590 ... 140 jntuk no
19 mech [civil, csit, iot] 500 ... 200 jntuk no

[20 rows x 7 columns]

wx
Details of college:
wx ['csit', 'aiml', 'aids'] 470 55.0 120 jntuk no
Placements greater than 500: cd
Placements greater than 500: gh
Placements greater than 500: ij
Placements greater than 500: mn
Placements greater than 500: op
Placements greater than 500: qr
Placements greater than 500: st
Placements greater than 500: yz
Placements greater than 500: qis
Placements greater than 500: prakasam
Placements greater than 500: civil
}
```

```

kl
-----
Branches: ['cse', 'it', 'iot']
Transport available college: ab
Transport available college: gh
Transport available college: mn
Transport available college: op
Transport available college: st
Transport available college: yz
Transport available college: pace
Transport available college: prakasam
percentage of college: cd
percentage of college: gh
percentage of college: ij
percentage of college: kl
percentage of college: mn
percentage of college: st
percentage of college: uv
percentage of college: pace
percentage of college: qis
percentage of college: rise
percentage of college: prakasam
percentage of college: zx
percentage of college: civil
Autonomous college: ab
Autonomous college: ef
Autonomous college: kl
Autonomous college: op
Autonomous college: uv
Autonomous college: yz
Autonomous college: qis
Autonomous college: rise
Autonomous college: zx
count: 9
Max Placements of college: 670 qis
Min Placements of college: 100 ab
Min Placements of college: 100 uv
>>>
===== RESTART: C:\Users\Dwaraka\AppData\Local\Programs\Python\Python312\project.py =====

```

CONCLUSION:

The campus choice predictor is a tool designed to assist students in selecting the most suitable college based on their preferences and qualifications. by analyzing various factors such as academic, performance, financial...