Artificial Intelligence

Lab Report

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Section: 6BM

Course Title: Artificial Intelligence Lab

Course Code: CSE - 3636

Submitted to,

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● Task 01:

○ What is python and What is it used for? Why should you learn python?

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together.

Python is commonly used for developing websites and software, task automation, data analysis, and data visualization. Since it's relatively easy to learn, Python has been adopted by many non-programmers such as accountants and scientists, for a variety of everyday tasks, like organizing finances.

We should learn python for various reasons.Some of them are,
- It's easier to learn than other programming languages.
- Non-programmers can understand it more easily.
- It has high level build in data structures.
- It is very useful for Rapid Application development.

These are some of the reasons why we should use Python.

● Task 02:

A Program to Display my Id, Name, Department, Semester, and Section using python.

```python
# A Program to Display my Id, Name, Department,
Semester, and Section using python.

print("My Id is C193058")
print("My Name is Muhammed Rakibul Hasan")
print("My Department is Computer Science &
Engineering")
print("I am in 6th Semester")
print("My Section is 6BM")
```

Output:

My Id is C193058

My Name is Muhammed Rakibul Hasan

My Department is Computer Science & Engineering

I am in 6th Semester

My Section is 6BM

○ **How to write single-line and multiple-line comments in python?**

In python single-line comments are wrote like bellow:

```
# This is a single line Comment
```

In python multiple-line comments are wrote like bellow:

```
"""This is
Multiple
Line
comment"""
```

○ **How can we work with String, Integer, and Float type variables in python?**

We can work with String , Integer and Float type variables in python in following way,

```python
python_string = 'Hello world'
python_integer = 10
python_float = 5.7

print('This is String: ' + python_string)
print('This is Integer: ' , python_integer)
print('This is Float: ' , python_float)
```

Output:

This is String: Hello world

This is Integer: 10

This is Float: 5.7

● **Task 03:**

○ **If a = 25, b = 4 then compute their addition, subtraction, quotient, multiplication, remainder, floor value, and power using python.**

```python
"""A program to compute addition, subtraction,
quotient, multiplication, remainder, floor value,
and power when If a = 25, b = 4"""


from math import floor



a = 25
b = 4

print("Addition: ", a+b)
print("Subtraction: ", a-b)
print("Quotient: ", a/b)
print("Multiplication: ", a*b)
print("Remainder: ", a%b)
print("Floor value: ", floor(a/b))
print("Power: ", pow(25,4))
```

Output:

Addition: 29

Subtraction: 21

Quotient: 6.25

Multiplication: 100

Remainder: 1

Floor value: 6

Power: 390625

○ **Display your Name, Age, and CGPA from user input using python.**

```python
# A program to Display Name, Age, and CGPA from
user input

name = input('Enter your Name: ')
age = input('Enter your Age: ')
cgpa = input('Enter your CGPA: ')
print('Name:' , name)
print('Age:' , age , 'Old')
print('CGPA:' , cgpa)
```

Input:

Enter your Name: Rakibul Hasan

Enter your Age: 23

Enter your CGPA: 3.79

Output:

Name: Rakibul Hasan

Age: 23 Old

CGPA: 3.79