

# **ARTIFICIAL INTELLIGENCE**

## **ASSIGNMENT 1**

### **BASICS OF PYTHON**

### **FOR ARTIFICIAL INTELLIGENCE**

Python is a general purpose high level, dynamic and interpreted programming language

#### **Where we can use Python language:**

- 1)For developing Desktop application
- 2)For developing web application
- 3)For developing games
- 4)For machine learning
- 5)For developing Artificial intelligence application

#### **Features Of Python:**

- 1)Simple and easy to learn
- 2)Open Source
- 3)High level programming language.
- 5)Dynamically Typed
- 6)Interpreted
- 8)Supports Dynamic memory Allocation.

## **Identifier:**

It is a name given to variables ,function ,class.

## **Identifier Rules:**

Rule-->1

In identifier Part we can Pass both alphabets(upper case/Lower case)

Rule-->2

In identifier part we can use number but should not starts with number

Rule-->3

special symbol are not allowed except underscore( \_ )

Rule-->4

Can have maximum 79 characters

Rule-->5

keywords can't be used in identifier part

Rule:-->6

PEP-8 (Python Enhancement proposal) Document that provides guidelines and how to practice on how to write Python code.

## **KEYWORDS :**

1.Special words which are reserved and it have special meaning

2.In Python total 35 keywords are Present

3.How to get all the keywords in group format:

```
help("keywords")
```

## **Flow control statements:**

Controlling the flow of program execution is called flow control statements.

Flow control statement is classified into 2 types,

**1.conditional flow control statement**

**2.loop flow control statement**

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1).conditional flow control statement:

\*Controlling a flow of program execution based on condition is called a conditional flow control statement.

\*Conditional statement is classified into 4 types,

1.simple if

2.if-else

3.elif

4.nested if-else

\*\*\*\*\*

2)Loop flow control statement:

Whenever we know the number of iterations that time we can go for a loop.

**SET A:**

1.WAP to check the given number is even or odd (take user input)

2.WAP to find greater value among the two number: n1=34 &n2=54

3. **WAP** to give hike to an employee based on his experience, you should ask employee date of joining exp 0 to 2 years no hike and 3 to 5 years Rs5000 hike, and 6 to 8 years RS7000 and 9 to n years Rs10000 (use elif)

### **SET B:**

1.wap to check the number is odd and check if the number is divisible by 7(nested if-else)

n=35

2.wap to validate facebook username and password  
condition is :---> username-->"python" and  
password--->"python masters"

**SET C:**

1.WAP to print each characters in given string by for loop

2.wap to print the number form 1-20 segregate even and odd number into list(FOR LOOP)

3.wap if number is even the print its square else print its cube

c=[2,4,5,3,7,9]

### **Assignment Evaluation:**

0: Not Done [ ]      1: Incomplete [ ]      2: Late Complete [ ]  
3: Needs Improvement [ ]      4: Complete [ ]      5: Well done [ ]

**Signature of the Instructor:** ----- **Date:** -----