

## Assignment-1

**Q1. Why do we call Python as a general purpose and high-level programming language?**

We call high-level programming language because it is in readable form then compiler convert into 0&1 format to read the instruction.

It is called general purpose because in all the fields we can use the python there is no specific domain where we cannot use it.

**Q2. Why is Python called a dynamically typed language?**

Due to type casting.

**Q3. List some pros and cons of Python programming language?**

Pros -object oriented languages, dynamically typed language

Cons -

**Q4. In what all domains can we use Python?**

Machine learning, Data Science, Deep Learning

**Q5. What are variable and how can we declare them?**

Variable are the names given to the specific memory location

**Q6. How can we take an input from the user in Python?**

By using the function called input () or directly can be taken from keyboard

Ex: name= input () or name = input ("Enter the name of user:")

**Q7. What is the default datatype of the value that has been taken as an input using input() function?**

Text type

**Q8. What is type casting?**

The casting is nothing but converting one type of data type to others

**Q9. Can we take more than one input from the user using single input () function? If yes, how? If no, why?**

**We can take mutiple input**

```
x, y = input("Enter two values: ").split()
print("the value of x: ", x)
print(" the value of y: ", y)
print()
```

**Q10. What are keywords?**

**Instruction are the keywords example**

**If ,elif, else, for, print**

**Q11. Can we use keywords as a variable? Support your answer with reason.**

**NO**

**Q12. What is indentation? What is the use of indentaion in Python?**

**To check the conditions to make the decision**

**Q13. How can we throw some output in Python?**

**Print()**

**Q14. What are operators in Python?**

**+ addition ,- sub ,\* mul,/ float div,// int div,\*\* power,% remainder**

**Q15. What is difference between / and // operators?**

**/ float division**

**// int division**

**Q16. Write a code that gives following as an output.**

...

iNeuroniNeuroniNeuroniNeuron

...

```
x = 'ineuron'
```

```
y=x*4
```

```
print((y))
```

**Q17. Write a code to take a number as an input from the user and check if the number is odd or even.**

```
Num = int(input() )
```

```
x=Num % 2
```

```
if x==1:
```

```
    print("entered number is odd")
```

```
else:
```

```
    print("entered number is even")
```

**Q18. What are boolean operator?**

**Boolean operator to just the condition whether its true or false**

**Q19. What will the output of the following?**

...

**1 or 0    True**

**0 and 0    False**

**True and False and True    False**

1 or 0 or 0 **True**

...

**Q20. What are conditional statements in Python?**

**If and else are the condition statement in python**

**Q21. What is use of 'if', 'elif' and 'else' keywords?**

**For nested loops if we have more than 2 conditions**

**Q22. Write a code to take the age of person as an input and if age  $\geq 18$  display "I can vote". If age is  $< 18$  display "I can't vote".**

```
name = input()
age = int(input())
print("user name=",name)
print("user age=",age)
if age >= 18:
    print("I can vote")
else:
    print("I can't vote")
```

Q23. Write a code that displays the sum of all the even numbers from the given list.

```
numbers = [12, 75, 150, 180, 145, 525, 50]
```

Sol:

```
number=[12,75,150,180,145,525,50]
```

```
sum=0
```

```
for i in number:
```

```
    rem = i % 2 ;
```

```
    if (rem == 0):
```

```
        sum = sum + i;
```

```
    else:
```

```
        sum = sum;
```

```
print("the sum of given list is=", sum)
```

Q24. Write a code to take 3 numbers as an input from the user and display the greatest no as output.

```
x=input()
```

```
y=input()
```

```
z=input()
```

```
if x>y:
```

```
    great = x;
```

```
else:
```

```
    great = y;
```

```
if great>z:
```

```
    great = great;
```

```
else:
```

```
great =z;  
print ("the greater among 3 value is=", great)
```

Q25. Write a program to display only those numbers from a list that satisfy the following conditions

- The number must be divisible by five
- If the number is greater than 150, then skip it and move to the next number
- If the number is greater than 500, then stop the loop

...

```
numbers = [12, 75, 150, 180, 145, 525, 50]
```

Didn't understand sorry