

## ## Assignment Part-1 by Satyam Markam

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

Ans: It is called general purpose language because it is used to solve wide range of different kind of problem, and it is not just theoretically but practically also.

It is called high level language because it is not compiled language it need to run by another program and it is human understanding language too that makes it high level language

Q2. Why is Python called a dynamically typed language?

Ans: it is called dynamically typed language because we don't need to declare the type of variable or memory allocation while assigning any value to variable.

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

Ans:

PRO's	Con's
Beginner friendly	Issue with design
Large libraries	Slower than compiled language
IOT opportunities	High memory consumption

Q4. In what all domains can we use Python?

Ans: webapp, gaming applications, ML and AI applications

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

Ans: variable are the space in memory, we can declare them by assigning a value to it, It will automatically take the variable type.

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

Ans: we can take input from by input() function.

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

Ans: it str(string)

Q8. What is type casting?

Ans: Converting data type of a value from one data type to other is type casting.

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

x, y, z = input(), input(), input()

Q10. What are keywords?

Ans: Python keywords are the reserved words that can not be used as variable name, function name or any other identifiers.

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

Ans: No, we cannot use keyword as variable because it is already having function to perform in python, It will show syntax error

Q12. What is indentation? What's the use of indentation in Python?

Ans: Python indentation is simply a space before a block of code, we will get indentation error if we will not give proper space in code blocks.

Q13. How can we throw some output in Python?

Ans: we can throw some output in python by print() statement.

Q14. What are operators in Python?

Ans: Operators are the symbol that perform operations on variable and values

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

Ans: / is for division it will show decimal also and // will show quotation

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

```
...  
iNeuroniNeuronNeuronNeuron  
...
```

Ans: print("ineuron"\*4)

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

```
number=int(input("Enter the number: "))  
if number%2==0:  
    print("Even")  
else:  
    print("Odd")
```

Q18. What are boolean operator?

Boolean operators are words and symbols, such as AND or NOT

Q19. What will the output of the following?

```
...
```

1 or 0 --1

0 and 0 --0

True and False and True --False

1 or 0 or 0 --1

```
...
```

Q20. What are conditional statements in Python?

Ans: Conditional statement are used for various condition like if that happen then do that,Or do nothing

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

Ans: If is used for write a conditional statement, elif we use for another condition and if we don't have condition we can use else.

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".

```
age=int(input("Enter your age"))
if age>=18:
    print("You can vote")
else:
    print("you cant 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]
...
numbers = [12, 75, 150, 180, 145, 525, 50]
sum=0
for i in numbers:
    if i%2==0:
        sum +=i
    else:
        continue
print(sum)
```

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

```
x,y,z=int(input()),int(input()),int(input())
ls=[]
ls.insert(0,x)
ls.insert(1,y)
ls.insert(2,z)

ls.sort()
print(ls[-1])
```

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]
...

numbers = [12, 75, 150, 180, 145, 525, 50]
for i in numbers:
```

```
if i>500:  
    break  
elif i%5==0 and i<150:  
    print(i)  
else:  
    continue
```