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

Python is easy for humans to understand and easy to write as compare to others, its object-oriented programming language everything comes under object

Q2. Why is Python called a dynamically typed language?

Python is called a dynamically typed language because we don’t need specify data type of variables its identify by given value of user during runtime

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

Pros:

1. Python is easy to write and understand
2. Python is free and open source
3. It has collection of libraries
4. Python is portable language.

Cons:

1. Python requires more space
2. python is slow speed

Q4. In what all domains can we use Python?

1. Web development
2. Machine learning
3. Networking
4. Game development
5. Embedded system
6. Data domain

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

Variables are name that is reference for storage.

we declare variable by just name the variable and assign the value to it and no need to specify datatype.  
 ex: sum= 0, final\_result=0

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

We take an input from the user by using **Input ()** function.

Ex: input\_1=input (“enter value of intput\_1”)

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

Default datatype of the value that has been taken as an input using input () is **String,**

Q8. What is type casting?

Type casting is converting one data type to another

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

We can take more than one using array and list or we can use split method

Q10. What are keywords?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [False](https://realpython.com/python-keywords/#the-true-and-false-keywords) | [await](https://realpython.com/python-keywords/#the-await-keyword) | [else](https://realpython.com/python-keywords/#the-else-keyword) | [import](https://realpython.com/python-keywords/#the-import-keyword) | [pass](https://realpython.com/python-keywords/#the-pass-keyword) |
| [None](https://realpython.com/python-keywords/#the-none-keyword) | [break](https://realpython.com/python-keywords/#the-break-keyword) | [except](https://realpython.com/python-keywords/#the-except-keyword) | [in](https://realpython.com/python-keywords/#the-in-keyword) | [raise](https://realpython.com/python-keywords/#the-raise-keyword) |
| [True](https://realpython.com/python-keywords/#the-true-and-false-keywords) | [class](https://realpython.com/python-keywords/#the-class-keyword) | [finally](https://realpython.com/python-keywords/#the-finally-keyword) | [is](https://realpython.com/python-keywords/#the-is-keyword) | [return](https://realpython.com/python-keywords/#the-return-keyword) |
| [and](https://realpython.com/python-keywords/#the-and-keyword) | [continue](https://realpython.com/python-keywords/#the-continue-keyword) | [for](https://realpython.com/python-keywords/#the-for-keyword) | [lambda](https://realpython.com/python-keywords/#the-lambda-keyword) | [try](https://realpython.com/python-keywords/#the-try-keyword) |
| [as](https://realpython.com/python-keywords/#the-as-keyword) | [def](https://realpython.com/python-keywords/#the-def-keyword) | [from](https://realpython.com/python-keywords/#the-from-keyword) | [nonlocal](https://realpython.com/python-keywords/#the-nonlocal-keyword) | [while](https://realpython.com/python-keywords/#the-while-keyword) |
| [assert](https://realpython.com/python-keywords/#the-assert-keyword) | [del](https://realpython.com/python-keywords/#the-del-keyword) | [global](https://realpython.com/python-keywords/#the-global-keyword) | [not](https://realpython.com/python-keywords/#the-not-keyword) | [with](https://realpython.com/python-keywords/#the-with-keyword) |
| [async](https://realpython.com/python-keywords/#the-async-keyword) | [elif](https://realpython.com/python-keywords/#the-elif-keyword) | [if](https://realpython.com/python-keywords/#the-if-keyword) | [or](https://realpython.com/python-keywords/#the-or-keyword) | [yield](https://realpython.com/python-keywords/#the-yield-keyword) |

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

We cannot use keywords as a variable, because they are all predefined in library

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

Indentation is space, in python indentation are mainly used for indicate the block of code

Q13. How can we throw some output in Python?

We can throw some output in python by using Print () method , we can print any number of line using print method

Ex: Print(“Data Engineer”)

So this print method will Data Engineer on console

Q14. What are operators in Python?

There are 4 types of operators available in python

1. Arithmetic operators ( +, -, \*, /, %)
2. Assignment operators (==,!=, <=, >=, <, >)
3. Logical operators (and, or, not)
4. Bitwise operators (&, |, ^, ~, <<, >>

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

/ is normal division operator and gives floating number

// is a floor division operator and gives whole number

Ex:  5 / 2 will return 2.5 and 5 // 2 will return 2. The former is floating point division, and the latter is floor division, sometimes also called integer division.

Q16. Write a code that gives following as an output

iNeuroniNeuroniNeuroniNeuron

string1="iNueron"

print((string1)\*3)

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("enter the number\n"))

if num%2==0:

    print("the given number is Even")

else:

    print("the given number is Odd")

Q18. What are boolean operator?

There are three Boolean operators

AND, OR, NOT

Q19. What will the output of the following?

1 or 0

Output for 1 or 0 is 1

0 and 0

Output for 0 and 0 is 0

True and False and True

Output would be False

1 or 0 or 0

Output would be 1

Q20. What are conditional statements in Python?

Conditional statements are used to provide condition, and conditional statements are

IF, ELIF, NESTD IF , ELSE

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

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

age=int(input("enter age of the person\n"))

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]

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

sum=0

for i in numbers:

    if i%2 == 0:

        sum=sum+i

print("Sum of even numbers from list is =",sum)

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

num1=int(input("enter value\n"))

num2=int(input("enter value\n"))

num3=int(input("enter value\n"))

if num1 > num2 and num1 >num3:

    print(num1," is gretest number \n")

elif num2>num3:

    print(num2,"is gretest number\n")

else:

    print(num3,"is greatest number")

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>150:

        continue

    else: i/5==0

    print(i)