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

Ans. By using input()

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

Ans. String

Q8. What is type casting?

Ans. Changing type of the variable

Q13. How can we throw some output in Python?

Ans. Using print(“ ”)

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

iNeuroniNeuroniNeuroniNeuron

name="iNeuron"

print(name\*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 a number to check odd/even: "))

if(number%2==0):

    print("Even")

else:

    print("odd")

Q18. What are boolean operator?

Ans. True, False. Which tells the condition is true 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

```

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 = input("Enter Age")

if int(age)>=18:

    print("I Can Vote")

else:

    print("I Can't Vote")

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 Ist Number"))

num2=int(input("Enter 2nd Number"))

num3=int(input("Enter 3rd number"))

if (num1>=num2 and num1>=num3) :

        print(num1, " is Greater")

elif (num2>=num1 and num2>=num3):

      print(num2, "is greater")

else:

     print(num3, " is greater")

(or)

if (num1>=num2 and num1>=num3) :

        print(num1, " is Greater")

elif num2>=num3:

    print(num2, "is greater")

else:

     print(num3, " is greater")

|  |  |
| --- | --- |
|  | Q28. Write a code to get the desired output of the following |
|  | string = "Big Data iNeuron" |
|  | desired\_output = "iNeuron"  Ans. |
|  |  |
|  | ``` string = "Big Data iNeuron"  print(string[9:16]) |
|  |  |
|  | Q29. Write a code to get the desired output of the following |
|  |  |
|  | string = "Big Data iNeuron" |
|  | desired\_output = "norueNi"  Ans. |
|  | string = "Big Data iNeuron"  print(string[-1: -8:-1]) |
|  |  |
|  | Q30. Resverse the string given in the above question.  Ans.  string = "Big Data iNeuron"  print(string[-1: :-1]) |
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|  | Q33. How can you print the below string? |
|  | ``` |
|  | 'iNeuron's Big Data Course' |
|  | Ans.  print("'iNeuron's Big Data Course'") |
|  |  |
|  |  |
|  | Q37. Write a code to access the word "iNeuron" from the given list. |
|  | ``` |
|  | lst = [1,2,3,"Hi",[45,54, "iNeuron"], "Big Data"]  Ans. |
|  | lst = [1,2,3,"Hi",[45,54, "iNeuron"], "Big Data"]  print(lst[4][2]) |
|  |  |
|  | Q38. Take a list as an input from the user and find the length of the list. |
|  | Ans.  lst = [1,2,3,"Hi",[45,54, "iNeuron"], "Big Data"]  print(len(lst)) |
|  | Q39. Add the word "Big" in the 3rd index of the given list. |
|  | ``` |
|  | lst = ["Welcome", "to", "Data", "course"] |
|  | Ans.  lst = ["Welcome", "to", "Data", "course"]  lst[3]="Big"  print(lst) |
|  |  |
|  |  |
|  | **### Coding problems** |
|  | Q76. Write a Python program to find the factorial of a given number. |
|  | Ans.  num = int(input("Enter a Number to do FActorial: "))  def factorial(k):      x=1      if k==0 or k==1:           return x      for i in range(1,k+1):           x=x\*i      return x  print(factorial(num)) |
|  | Q77. Write a Python program to calculate the simple interest. Formula to calculate simple interest is SI = (P\*R\*T)/100  p=int(input("Enter the principle Amount: "))  t=int(input("Enter number of years: "))  r=int(input("Enter Rate of interest: "))  def SI(p,t,r):      sim\_int = p\*t\*r/100      return sim\_int  print(SI(p,t,r)) |
|  |  |
|  |  |
|  | Q78. Write a Python program to calculate the compound interest. Formula of compound interest is A = P(1+ R/100)^t.  Ans.  p=int(input("Enter the principle Amount: "))  t=int(input("Enter number of years: "))  r=int(input("Enter Rate of interest: "))  def CI(x,y,z):      Amount = x\*(1+(z/100))\*\*y      return Amount  print("Total Amount after 10 years= ",CI(p,t,r))  print("Compound Interest: ", CI(p,t,r)-p) |
|  | Q79. Write a Python program to check if a number is prime or not.  Ans.  num=int(input("Enter a number to know prime or not: "))  k=0  for i in range(1,num+1):          if num%i==0:              k=k+1  if k==2:      print(num, " is prime")  else:      print(num, " is not prime") |
|  |  |
|  | Q80. Write a Python program to check Armstrong Number.  Ans.  num=int(input("Enter number to check Armstrong: "))  def Armstrong(k):      temp=0      n=str(k) #to know the number of digits      z=len(n)      while k>0:          i=k%10          temp=temp+i\*\*z          k=int(k/10)      return temp  num1=Armstrong(num)  if num1==num:      print(num, "is Armstrong")  else:      print(num, "is not Armstrong") |
|  |  |
|  | Q81. Write a Python program to find the n-th Fibonacci Number.  num=int(input("Enter the range of Fibonacci series: "))  a,b=0,1  ls=[0,1]  for i in range(3,num+1):      temp=a+b      ls.append(temp)      a=b      b=temp  print("Fibonacci Series is: " ,ls)  print(num, "th fibonacci number is: ", ls[num-1]) |
|  |  |
|  | Q82. Write a Python program to interchange the first and last element in a list.  ls=[0,1,2,3,4,5,6,7]  print("before intercange: ",ls)  temp=ls[0]  ls[0]=ls[-1]  ls[-1]=temp  print("After intercange: ",ls) |
|  |  |
|  | Q83. Write a Python program to swap two elements in a list.  Ans.  ls=[0,1,2,3,4,5,6,7,8,9]  index1=int(input("Enter the index1 to swap: "))  index2=int(input("Enter the index2 to swap: "))  print("list before Swap: ", ls)  def swap(x,y,ls):      temp=ls[x]      ls[x]=ls[y]      ls[y]=temp      print("List After Swap: ",ls)  swap(index1,index2,ls) |
|  |  |
|  | Q84. Write a Python program to find N largest element from a list.  ls=[0,1,2,3,4,5,12,7,8,9]  print(max(ls)) |
|  |  |
|  | Q92. Write a Python program to convert a list of tuples into dictionary. |
|  | ``` |
|  | Input : [('Sachin', 10), ('MSD', 7), ('Kohli', 18), ('Rohit', 45)] |
|  | Output : {'Sachin': 10, 'MSD': 7, 'Kohli': 18, 'Rohit': 45}  Ans.  Input = [('Sachin', 10), ('MSD', 7), ('Kohli', 18), ('Rohit', 45)]  dict={}  for i in Input:      dict[i[0]]=i[1]  print(dict) |
|  | ``` |
|  |  |
|  | Q93. Write a Python program to create a list of tuples from given list having number and its cube in each tuple. |
|  | ``` |
|  | Input: list = [9, 5, 6] |
|  | Output: [(9, 729), (5, 125), (6, 216)] |
|  | Ans.  list = [9, 5, 6]  list1=[]  for i in list:      x=i\*\*3      list1.append((i,x))  print(list1) |
|  |  |
|  | Q94. Write a Python program to get all combinations of 2 tuples. |
|  |  |
|  | Input : test\_tuple1 = (7, 2), test\_tuple2 = (7, 8) |
|  | Output : [(7, 7), (7, 8), (2, 7), (2, 8), (7, 7), (7, 2), (8, 7), (8, 2)] |
|  | Ans.  test\_tuple1 = (7, 2)  l1=len(test\_tuple1)  test\_tuple2 = (7, 8)  l2=len(test\_tuple2)  list=[]  for i in range(l1):      for j in range(l2):          list.append((test\_tuple1[i],test\_tuple2[j]))  for i in range(l1):      for j in range(l2):          list.append((test\_tuple2[i],test\_tuple1[j]))  print(list) |
|  |  |
|  | Q95. Write a Python program to sort a list of tuples by second item. |
|  | ``` |
|  | Input : [('for', 24), ('Geeks', 8), ('Geeks', 30)] |
|  | Output : [('Geeks', 8), ('for', 24), ('Geeks', 30)] |
|  | Ans.  Input=[('for', 24), ('Geeks', 8), ('Geeks', 30)]  n=len(Input)  for i in range(n):      for j in range(n-1):          if Input[j][1]>Input[j+1][1]:              temp=Input[j]              Input[j]=Input[j+1]              Input[j+1]=temp  print(Input) |
|  |  |
|  | Q96. Write a python program to print below pattern. |
|  | ``` |
|  | \* |
|  | \* \* |
|  | \* \* \* |
|  | \* \* \* \* |
|  | \* \* \* \* \* |
|  | Ans.  num=int(input("Enter the pattern Range: "))  for i in range(num+1):      for j in range(i):          print('\*',end=" ")      print() |
|  |  |
|  | Q99. Write a python program to print below pattern. |
|  | ``` |
|  | 1 |
|  | 1 2 |
|  | 1 2 3 |
|  | 1 2 3 4 |
|  | 1 2 3 4 5 |
|  | Ans.  num=int(input("Enter the pattern Range: "))  for i in range(num+1):      for j in range(i):          print(j+1,end=" ")      print() |
|  |  |
|  | Q100. Write a python program to print below pattern.  A  B B |
|  |  |
|  |  |
|  | C C C |
|  | D D D D |
|  | E E E E E |
|  | Ans  list=['A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S','T','U','V','W','X','Y','Z']  n=len(list)  x=input("Enter an alphabet in Caps: ")  for k in range(n):      if list[k]==x:          break  for i in range(0,k+1):      for j in range(0,i+1):          print(list[i],end=" ")      print() |
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