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| **SUBJECT : 2CEIT404 – PYTHON** | **PRACTICAL - 3** |

**Practical-3: Iterative Statements and Strings**

**1) Write a program to check if number is Armstrong. Code:**

|  |
| --- |
| n=int(input('Enter Number For Checking Armstrong or Not:-')) temp=n  sum=0  while(n > 0):   t=n%10   sum+=(t\*\*3)   n=int(n/10)  if(sum==temp):   print(f"{temp} is a Armstrong Number")  else:   print(f"{temp} is Not a Armstrong Number") |

**Output:**

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**2) Write a program to check special number. (Number is equal to the sum of its divisors)**   
**Code:**

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| --- |
| n=int(input('Enter Number For Checking Specical or Not:-')) |

|  |
| --- |
| sum=0 |

|  |
| --- |
| for i in range (1,6): |

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| --- |
| if(n%i==0): |

|  |
| --- |
| sum+=i |

if(sum==n):   
 print(f"{n} is a Specical Number")   
else:   
 print(f"{n} is Not a Specical Number")

**Output:**

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**3) Write Create a program that will print out words that start with 's' from the below given statement.**

**st='Print only the words that start with s in this sentence'**

**Using If Statement:-**   
**Code:**

|  |  |
| --- | --- |
| st="Print only the words that start with s in this sentence"  for i in st.split(): | |
| print(i)  **PATEL ZEEL PRAKASHKUMAR - 21012021099** | **1** |

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| --- |
| if(i[0]=='s' or i[0]=='S'): |

|  |  |  |
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**Using (i.Startswith):-**   
**Code:-**

|  |
| --- |
| st="Print only the words that start with s in this sentence" |

|  |
| --- |
| for i in st.split(): |

if(i.startswith('s')):   
print(i)

**Output:-**

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**4) Write a program to give output of entered number multiplication table. Code:**

|  |
| --- |
| n=int(input('Enter Number For Multiplication Table:-')) |

|  |
| --- |
| for i in range (1,11):  temp = n \* i  print(f"{n} X {i} = {temp}") |

**Output:**

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**5) Write a program to find the sum of digit of an input number using while loop. Code:**

|  |  |
| --- | --- |
| n=int(input('How many Number You Want to Enter:-')) sum=0 | |
| while(n > 0):   t=n%10   sum+=t   n=int(n/10)  print(f"Sum is {sum}") |  |
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**6) Go to String below and if the length of a word is even print "even!". st='I love doing python programming in spyder'**

**Using st Statement:-**   
 **Code:**

|  |  |
| --- | --- |
| st='I love doing python programming in spyder'   |  | | --- | | if(len(st) % 2 == 0):   print("String is Even")  else:   print("String is Odd") | |

**Output:**

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**Using st.split() Statement:-**   
 **Code:**

|  |  |
| --- | --- |
| st='I love doing python programming in spyder'   |  | | --- | | if(len(st.split()) % 2 == 0):   print("String is Even")  else:   print("String is Odd") | |

**Output:**

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**Using [for loop + st.split()] Statement:-**   
 **Code:**

|  |  |
| --- | --- |
| st='I love doing python programming in spyder' | |
| for i in st.split():   if(len(i) % 2 == 0):   print(f"'{i}' is Even")   else:   print(f"'{i}' is Odd") |  |
| **Output:**   |  | | --- | |  |   **PATEL ZEEL PRAKASHKUMAR - 21012021099** | **3** |

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| **SUBJECT : 2CEIT404 – PYTHON**  **PRACTICAL - 3**  **7) Write a program to calculate frequency of digit, upper case character and**  **lower case character from the string.**  **Code:**  st=input("enter string: ") |

|  |
| --- |
| dc,uc,lc,sc=0,0,0,0  for i in st:   if(i>='a' and i<='z'):   lc+=1   elif(i>='A' and i<='Z'):   uc+=1   elif(i>='0' and i<='9'):   dc+=1   else:   sc+=1  print(f"digits = {dc},\nLower case = {lc},\nUpper case = {uc},\nSpecial Character = {sc}") |

**Output:**

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**8) Write a python program to check if a string is a palindrome or not.**

|  |
| --- |
| **Using [::-1] :-** |

**Code:**

|  |
| --- |
| a="zeel"  a1=a[::-1]  if(a==a1):   print(f"'{a}' is Palindrome")  else:   print(f"'{a}' is Not Palindrome") |

**Output:**

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| **Using Strrev() :-**  **Code:** | |
| a="zeel"  rev = ""  for i in a:   rev = i + rev  if(a==rev):   print(f"'{a}' is Palindrome")  else:   print(f"'{a}' is Not Palindrome") |  |
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**Output:**

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**Using for loop :-**

**Code:**

|  |
| --- |
| string = "zeez"  palindrome = True  for i in range(len(string)):   if string[i] != string[-i-1]:   is\_palindrome = False   break  if palindrome:   print(f"{string} is a palindrome.")  else:   print(f"{string} is not a palindrome.") |

**Output:**

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**9) Write a python program to remove i’th character from string.**  **Code:**

|  |
| --- |
| st=input("enter string: ") |

|  |  |
| --- | --- |
|  | |
| n=int(input('Enter Number of Which Element is Remove:- ')) print("After Removed I'th Element String :- ")  for i in range(len(st)):   if(i==n-1):   continue   else:   print(st[i]) |  |
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**Output:**

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**10) Write a python program to check if the substring is present in a given string. Code:**

|  |
| --- |
| string = input("Enter a string: ") |

|  |
| --- |
| substring = input("Enter a substring to search for: ") |

|  |
| --- |
| # Use the "in" operator to check if the substring is present in the string if substring in string:   print(f"{substring} is present in string.")  else:   print(f"{substring} is not present in string.") |

**Output:**

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