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| A picture containing drawing, stop, room  Description automatically generated | Python Programming Practical  Practical #1 | | | | |
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| **Name** | Sahil Shah | | **Roll Number** | 21302C0022 | |
| **Subject/Course:** | Python Programming | **Class** | | | SY BSc. IT |
| **Topic** | Basic Concepts | **Division** | | | C |
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| A) Create a program that asks the user to enter their name and their age. Print out a message addressed to them that tells them the year that they will turn 100 years old. | | | | | |
| Program  name = input("Enter your name: ")  current\_age = int(input("Enter your age: "))  hundredth\_year = 2020 + (100 - current\_age)  print(f'{name} will become 100 years old in the year {hundredth\_year}.')  Output Screen Shots | | | | | |
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| B) Enter the number from the user and depending on whether the number is even or odd, print out an appropriate message to the user. | | | | | |
| Program  num = int(input("Enter a number: "))  mod = num % 2  if mod > 0:  print("This is an odd number.")  else:  print("This is an even number.")  Output Screen Shots  EVEN    ODD | | | | | |
| C) Write a program to generate the Fibonacci series.  Program  nterms = int(input("How many terms? "))  n1, n2 = 0, 1  count = 0  if nterms <= 0:  print("Please enter a positive integer")  elif nterms == 1:  print("Fibonacci sequence upto",nterms,":")  print(n1)  else:  print("Fibonacci sequence:")  while count < nterms:  print(n1)  nth = n1 + n2  n1 = n2  n2 = nth  count += 1  Output Screen Shots | | | | | |
| D) Write a program that reverses the user defined value and check whether that number is palindrome or not.  Program  n=int(input("Enter number:"))  temp=n  rev=0  while(n>0):  dig=n%10  rev=rev\*10+dig  n=n//10  if(temp==rev):  print("The number is a palindrome!")  else:  print("The number isn't a palindrome!")  Output Screen Shots  NOT P    **P** | | | | | |
| E) Write a program to check the input value is Armstrong.  Program  n = int(input("Enter a number: "))  s = 0  t = n  while t > 0:  digit = t % 10  s += digit \*\* 3  t //= 10  if n == s:  print(n,"is an Armstrong number")  else:  print(n,"is not an Armstrong number")  Output Screen Shot  NOT A    A | | | | | |
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| F) Write a program to print the factorial for a given number.  Program  num = 7  factorial = 1  if num < 0:  print("Sorry, factorial does not exist for negative numbers")  elif num == 0:  print("The factorial of 0 is 1")  else:  for i in range(1,num + 1):  factorial = factorial\*i  print("The factorial of",num,"is",factorial)  Output Screen Shot | | | | | |
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