18-08-25 --- PBZ .0 20 --- n/") bring Task 3: ("box no many or)" 4) Aboy - de 1 no Hay - Aboy built in modules, (reating is designed modules and organizing cale into. Pockages in Pathon. (sur - No - 1233, 500- 23/13/01) (55m (b - 26/01-31:-19 - 19 (19 - 19040F) 1645 - 20 reports with and random operations a work with oferating system. 3. complete bosic station (1) 20 "(station (paint)) PINE ("POTE ON LETTON :") SYS - VERSION) Algorithm: ("-- 2)1424012 -- 0/") HANG 1. Inflat required modules, most, random; 0.5 system 2. math I bandom [0.0,1.0] a random subspect of [2,6] 8,8,2,3] = 6 101 Print (pinean (Edata) 211, stars, mean (data)) box floor (2,3) factoral (5) Kind (f [(duty) = state mode (data)) h. create: (Potton if not present and Print the current wo 3. OS & Say. directory (1) atab] was state! (((catab)) waste "4) this - 11st all files / directiones in new current directory - Aint Pathon interprete, version.

no so makes o green Trong Program: solid Ales II prister 50- 1056 by infort moth more random specials ton " band solvent import os imfort Syl 2 700 2 10 10 2011 both import statistics from Roth 1:b Print ("random (s) =;" modh. sqrt (s)). Print (" radians (30) =" math , radians (30) Print (" random (0,1) = moth rathum (1)) which most loss Print (" Pi=", moth Pi) tugot the house Print (" (eil (2.3) =" match: (eil (2.3)) Print (" floor (2-3) = ", math. -floor (2-3)) 630001/A trill Pant (" factional (5) =," math. factional (5)). Pant ("9cd (5115) =" modh. 9cd (5115)). Print (" Power (3.5) =," made (3.5)) find (" log base 3 of a = " math 109 (23)) a-vol=100 int val = float (inf Print ("f sinf(00) = fmoth : (sinf-var) is (Non) = fm [nnn-vai such parties the sac sacretally inflomented asing and statements course thoms and looking statements

MINE (" In --- 05 &, 549 --- ") Path - Pathon (ab = Path (r"c = (Puthon lad")

Path - Pathon (ab mand.r (Parents = True, exists -ok- Pue) Mrs. (f" created rensured = [Path - Python 1963"). targed - di mildir (Porenes = thue, enist - ore = thue) as. Chair (+orget-dil) common trast and variety PANT E(" Changed into 0.501) ("1.000 oth) 1) 1 that And ("Directory contents;", os ()) was sized stuffers And ("Python version:", Sys. version) Print ("In -- statistics -- ") them soules modules made, them soules modules made, them soules are the state of the soules are data 1 = (5,6,8,10) mobiled L Alon. doda 2= (2.5,3,8,3,9,4,2,5,6) mobios o (0.100) 2004 (2,3) todonal(5) Print (finean ({datai} =11, stors. mean (datai)) Rint (f [(duay) = state mode (data2) . E02 3 20 Print (f" Stder ({daya1y'mode (daya1) Print (f" stder ((data > 3); "stats. stder (data (2)) LONGING MAHMO MAG NE SOMOFIAM JANA 110 M (SHOT MERPIEW, VESTOR).

Bit Bilated se Bated als Expected sample outfut: --- MATH & Random ---(ell (2.3)=3 floor (2.3) E.R. 1000 See 2000 SAH (2) = 7.73 606 7977 49977 -Belond (2) = 120 valians (30) = 0.5235 9877 559 8 2988 309 (21.5) 08 9499 495 (1688 M MALE 00 = (10) UI() 5410PURA 01=(01-) 200 randle (2.6)= 6 Pow (35) = 243 Phrot nearly formulted result. (09 PORCE 3 OF 2 = 0.6209297535714574 of 3: to create a mount DUT = (1004) ANA 2: , DUT = (00) ton --- 2/2,220 --orded lessured completion top act to other the random sample con PA-MOR VERSION: 3 X.X -- 20ITEIRATE TEARS -.. mean [(5, 6, 8, 10)] = 2.25 median ([s.(18,10]) =2 = ([o.,8,10]) SHOON ((8.5,3,2,8,3,9,4,2,5,6)) = 2.27156388 8330 1993 Pi= 3:141592653589793 . . товая в нти. (el (2.3)=3 ELLANDEL 908 ELLE = (5) +10 from (2.3) =2 2862 8 5 22 LL 36 5865 0 = (02) 5401PM factional (5)=120 OFS (-19) = 10 SHIPS HIS GILS & NAMLE OF (10) W() SWIPP 7 = (3.5) +15 mm Pow (35) = 243 and nouth formulas recula. 109 page 3 of 2 = 0.6309297535714574 109 10 (100) =2.0 int (00) = True, is non (Nan) = true --- OS & SYS --created lensured coellython tab Python Version: 3.x.X --- STASISTICS mean [(5,6,8,10)] =7.25 median ([s.6,8,10]) =2 Stder ((2.5,3,2,8,3,9,4,2,5,6)) = 2.27156333 83010

white same entitle

Task 3.2 :create a Python Package named cord Pack containing a module (and fun that imforts the random module. Assign a could call a function from the modife and display a random sample of Cards. Algorithm: 10 (in range (1.5.5); ster 1: Start (;) 509190 , 2 500) stel 2: To vecute a lavage: card laux 1111 Ster 3: To create a module - hapour stell u: Assign a lard Range infort. cord fun stel 5: call a module function (ard fun fun (c). stel 6: pislay the random sample Card cuthet: stel 7: Stol. JUDY292 C: 14505 15+4000165. MAT 24 66831 APP PORT 10 COL / 18034001 Python / 31/ his / sito, faucago [2, 56, 13, 22, 40, 41, 41, 34, 34, 49, 14, 50, 15, 3 5, 17, 18, 33, 5 36, 42, 12, 6, 16, 48, 28, 2, 27, 11, 46, 78, 25, 30, 23, 26, 10, 18 (1) 31 441 ES 11 45 4]

Program: MARIE O PHILOS PACKED cold Path Contacting Lamon mobile out and modern part nul- bies states card - fun: import grandom, nett notal o not sono o mobilion o der fun (); , 2640 to offmod (J=2PhD) for i'm range (1,5,3); 41012 STOPE (and s. append (i) PARA ("Inin", shuffled - cards, ["n [n"]) create a module. SEADS PRO O VEISSY IN BE mymodpy 185: call a module function infort . card fun Card fun. fun ((). of 6: Distay the random sample Card output: 90+2 : F 81 Restart C: lusers 1students. MAT 2V(6833) APP DOLA Woull 1 Progra Putton 1 311 lib 1 sito, Paucage

[5,24,13,22,40,41,47,34,39,49,14,50, 15,35,17,18,3] 36, 42, 12, 6, 16, 48, 28, 2, 27, 11, 46, 78, 25, 30, 23, 26, b uz, 3,44, 57, 1, 45, 9

Task 3.3:you are topiced with developing a modular calculator application in Authorn. The calculator; should support , base (d. D) HOTHUR 906 atthematic operations. d-D notes def mutifly (a,b); Algorithm: 8 10 0 ment 1. Define functions for addition, subtraction, multiplication a division. buse value ettor (" (annot divide by 2000) 2. Hardle division by zero. 3. impor the module these functions hiTritalize two numbers (and 625) 5. (an each function > (a,b) 6. And result of all operations. Priot ("Surtia thon", mymoth. Subject (ab)) ((dip) with mutth cation,", mynedth . muttelly (qib)) find (" Division", mymath. duide (916))

rogram: det add (arb) who was a consissor they recent return att will be the control of the new of def surract (a.b) .200Horsing terun a-b get worthbia (a.p); The state of the s return a+ b 0=2d Ti take value error ("cannot divide by zero") our les uniques al mon return alb imfat my math. 2000tonil. statt slubom set tom a=10 (sed out) sed out out out (all each function > (alb) b=5 Print (" addition:", my mater .add (a,b)) Ainst ("subtraction", mymoth. Subtract (ab)) find (" muttillication,", mymath, muttilly (9.16)) find (" Divsion", mymoth. duide (a16))

Task 3.4 you are working on a Python programming that requirey 1. Cheate -the Posts - Builting you to Renform various mathematical oferestions and (dub) 660 (hub). geometric are calculation. To organize your code but: named my louka se you devide to preate a larvage :(dip) toollews 20h com which includes sub lockage. dap revent def divide (ab); Algorith m: pead fi 1. ocate modifications. py module a-create area finctions. Py module return 9 15. 3. Create main. By 2. Deate the area functions by module. un find the outlet as expected. dtom Hohat def circle - area (rodiug); How moth get thanke votor out base height 3. Create the main by fire the way made functions. hand (" cace alea (Maires 27)" are function over 1); sind (" Rectable area (5x10): ", area functions area (5,10) that (" THERRIC OF OF YEASE = (LASSIST = 8); OFCE HARVER are (68) .

Program: 1. Cheate the most functions by module. emans on to grande withoutshin sudhor mider of def add (aib). or nothing on mother of the herum cath some second o shows of shires. def subtact (a,b); godo we reputation return ax b def divide (a,b); subom eq 200000 milition, shoe. if b==0 return rettor': Division by zero; 5431. g. Py module rate main. By 2. Create the area functions by module. return 916. imbre moth def circle - area (redius); return modh def thangle return og# base* height 3. Create the main by file I using math functions, funt (" chue area (Mairs=7);" area fun thon averly) find (" Rechangle area (5x10):", area functions area (5) Phint ("Thangle area (base = 6, height = 8); area taking are (6)

outlet: Addition : 15 sumothen:5 LOUIS ONSESSION - FOUR STATES muttiPlication: 50 was a so sales are arrestated acoular mas we paision: 20 the sample of sample and sale white is a list citale are: 1539 38 0400 258 99 85 एकार देवाहर क्षेत्र वातात पाना भारत पाना Reclangular -SMH-MORIA Atea: 50 Than 91 @ At eq: 240 1-092-1 Exercise on entire sucression as exercise हे. हिं विश्वय व्यवसां क्षिण्य व्यवसा A. Comfute 40101 (1000) Hotel Hotel Dellar 1) total The Co sea sage, " best day, " non- how it is 2. Mrs ("soles (mag. sup): 1 sues). (potot: " Lotor") tong & 9. Print with a loof 10. Stal-VEL TECH - CSE EX NO. PERFORMANCE (5) RESULT AND ANALYSIS (5) VIVA VOCE (5) RECORD (5) TOTAL (20) SIGN WITH DATE Resulting this, the Program for importing Python modules & lourages was successfully excuted and the owhet was vertica.