programming. rusk Mo: 6 1/2/25 Aim 2 to write python progrem using Function concepts in python programming Algorithm? 1. Start the program 2. print a welcome message; outputs a simple greeting,
3. Determine and print the number of students: User but () to find number. ond min a to determine the highest end lawest values in in student-greates 6. print sevent grado: uses reversed C) to reverse the sould list and converts to list. 7. Generate and print a range of grade indices susce rangel) to create a list of indices from 1 to number of students & stop det analyze - student - grods (): # sample date Student - names = ["Alice", "Bob," "charlie", Diana"] Student - grade = [85, 92, 78, 20] # 1. print a welcome message. print ("welcome to student greeds Analy zer 11") Proof ("Number of students;" num- students) # 2. Determine and print number of students. Amattwelcone to stocket grades Analyzer In") #3. print type of student mans list and grads list pant ("In Type of student - nome list:"; type (student numus) Print ("Type of student grads (13t:" type (student grads))

the the two claments were suscipped, the list is a feet Number of Students; 4 Number of Students: 4 Type of student names list: < class 'list' 2000 signises to Type of strelent-grade list: < class: "list") ] = strelets Highest grade: 92 (88: 502 501) : sour } Consest grade: 72. [20012 | do 81: mon ] Sortal grads: [72, 85, 90,92] Reversed grades: [92, 90, 85, 78] grave indices from 1 to prumber of students : (1,2,3.4) for Student in Students: Print (stockint) bubble - sort - scors (student) point ("In Alth Sorting: ") der students in shedentes Private (students) Repolls the progress for various sacreting end garding operation is executed and varified successfully

Hm. Find print the highest and lowest grack. highest-grade = max (student -grade)
lowest-grade = min (student -grade) print ("In Mishort grade 1" highest-grade). print ("lowest grade:", bowest-grade) #5. print the list of gradu sovied in as cerding order.

Sorted - grades = sorted student -gradul

print ("in sould print ("In sorted grads;", sorted-grads) #6. print the list afgrads in reverse order. reversed-grade = list (reversed (sorted-grade)). print (l'Reversed grades": reversed-grade). # 7. Generate and print a range grade indias from 1 to rember of students grade - indices = list (angle (1, num - students +1))

print ("In excele indices from 1 to number of student:"

grade : indices). H Run the analysis analyze-student-grads() Volume only else city of course pression by second Lister a graphy make der with

output:- (about trabale) was a damp - tradpid.

Arithmetic operation: months aim a damp - travol som of locand Joseph " taking to be in the Difference blue to and 5: 51; whose travel tring product of 10 and 5:50 wines to to set thing . 3 ! Quotient of 10 and 5:200 stroz = about - latroz Greethy: (dury - between "; whose between " thing Hello, Alice & welcome to program. reversed grade : list (reversed Coorded - grade). First (PREVENSE) gradus": 16 versed - grade). # 7. Grenoph coul print a rays great indias from the durage - welles = (184 (and (1' wow - statute +1)) wint ("In crack India from I tonumber of studen" grade + molices) the Man the enoughts analyse . Student - greated

72 Task (6,2)2 Algorithm 1/9/25 Algorithms 1. Start the program. 2. User input for number. The program prompts the use to choose an arithmetic operation (addition subtraction, mu tiplication, division), 3. Display operation: Bused on user's choice, the program, 1 performs the choose arithmetic operation defined functions. 4. Display Result: The program displays the results of operation, 5. Stop. program) det add (a,b); Return the sum of two numbers." return atb. det substract (a, b); " Return the difference the two numbers," return a-b. det multiply (a,b); " neturn the quotient product of two numbers, " def divide (4,6); ""Return the grokent of two number Handks division by Zero"" H 6120 return alb return " error : Division by zero" det greet (nume): "" Redur a greeting message dor user, "": return if Hello, [num e ]! welcome to program." det main (). # Demonstrating the use of user - defined functions. # Arithmeter operation. num 2 = 5,

print ("Arithmetic operations;")

Print (f" Arithmetic sum of & Enum 1 3 & [num 2 3;", add (num!, non))

Print (f" Difference blue Enum 13 and Enum 23;", substruct (num!, num2)

print (f" product e/ [num 1 3 a fnum 2 3;", multiply (num!, num2))

print (f" avokient of [num 1 3 a fnum 2 1;", divide (num!, num2))

H Greeting the user,

print ("In aree tings)

Print (greet (user-name))

# Run the main traction

of - - name -- = "main -- "?

main ()

Thus, the python program, using 'Functions' concepts was successfully executed and the output was revisfed.

VEL TECH - CSE	
EX NO.	6
FREDRMANCE (5)	.6
RESULT AND ANALYSIS (5)	B
VIVA VOCE (5)	5
RECORD (5)	-
TOTAL (20)	15
THE WITH DATE	2