# GLS UNIVERSITY
## FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY
### 221601505 PRACTICALS ON PYTHON

Assignment 4

1. Write a Python program that will ask the user to input age of a person and generates an exception if user enters non-numeric data and display the proper message.

2. Write a Python program that will ask the user to input 2 integer values, if user enter second value as zero than it generates the appropriate exception and display the message.

3. Write a Python program that will ask the user to input one integer value and if user inputs non-numeric data than it generates Value Error and display proper message till user inputs numeric data.

4. Write a Python program that will demonstrate the use of raise keyword.

5. Write a Python program that will ask the user to input positive numeric number and if user inputs any other data then it generates appropriate exception and message.

6. Write a Python program that demonstrate the use of finally and else clause in exception.

7. Write a Python program that asks the user to input a number and if number is negative generates a value error.

8. Write a Python class named Student with two instances student1, student2 and assign values to the instances' attributes. Print all the attributes of the student1, student2 instances with their values in the given format.

9. Write a Python class to find a pair of elements (indices of the two numbers) from a given array whose sum equals a specific target number. Note: There will be one solution for each input and do not use the same element twice.

10. Write a Python class Employee with attributes like emp_id, emp_name, emp_salary, and emp_department and methods like calculate_emp_salary, emp_assign_department, and print_employee_details.
Sample Employee Data:
"ADAMS", "E7876", 50000, "ACCOUNTING"
"JONES", "E7499", 45000, "RESEARCH"
"MARTIN", "E7900", 50000, "SALES"
"SMITH", "E7698", 55000, "OPERATIONS"

   - Use 'assign_department' method to change the department of an employee.

   - Use 'print_employee_details' method to print the details of an employee.

   - Use 'calculate_emp_salary' method takes two arguments: salary and hours_worked, which is the number of hours worked by the employee. If the number of hours worked is more than 50, the method computes overtime and adds it to the salary. Overtime is calculated as following formula:

11. Write a Python class BankAccount with attributes like account_number, balance, date_of_opening and customer_name, and methods like deposit, withdraw, and check_balance.