Output

grades list [85, 90, 78, 92, 88]

enter the index of grade you want : 10

invalid index. please enter a valid index

7-9-25

Task 9: implement exceptions and exceptional handling in python

Aim: To implement exceptions and exceptional handling in python

Algorithm

1. Start the program
2. Initialize a list of grades
3. prompts the user to enter the index of grade
4. attempts to display the grade at the specific index

Program

```
#initialize the list of grades
    grades = [85, 90, 78, 92, 88]
print("Grades List:", grades)
index = int(input("Enter the index of grade you want
                  to view:"))
print(f"The grade at index {index} is: {grades[index]}.")
except IndexError
print("Invalid index. Please enter a valid index.")
except ValueError
print("Invalid input. Please enter a numerical index.")
```

Output

```
enter the numerator : 10
enter the denominator : 0
ERROR!
Error : Division by zero is not allowed
```

Problem 9.2 you are Developing a Python calculator program that performs Basic arthmetic operations

Algorithm

1. start the program
2. prompts the user to enter two no
3. attempts to Divide the numerator Denominator
4. If the Denominator is zero., catches the zero Division error

Program

```
Def Divide-numbers():
try
numerator = float(input("Enter the numerator:"))
Denominator = float(input("Enter the Denominator:"))
result = numerator / Denominator
  print(f"Result: {result}")
  except zero Division error
print("Error: Division by zero is not allowed.")
except value Error:
print("Error : Please enter valid numbers.")
Divide-numbers()
```

out put:

Enter a number: 15

exception occured: invalid Age

Problem 9.3 : you are building a python application to Determine If a person is eligible to vote Based on their age

Algorithm

1. Define the custom exception
2. Prompt the user for input
3. check If the age is below 18
4. Handle the exception.

Program

```
class invalid Age exception(Exception):
    "Raised when the input values is less than 18"
    pass
number = 18
try:
    input_num = int(input("Enter a number:"))
    If input_num < number:
        raise Invalid Age Exception
    else:
        print("Eligible to vote")
except invalid Age Exception
print("Exception occured: Invalid Age")
```

EX NO.	9
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	
IGN WITH DATE	15

Result : Thus the program for implement exception and exception handling is executed