

Task 9: Implement Exceptions and Exceptional handling in python

Aim: To implement Exceptions and Exceptional handling in python.

Algorithm.

- 1) start the program.
- 2) Initializes a list of grade
- 3) Prompt the user to enter the index of the grade they wish to view.
- 4) Attempt to display the grade at the specified index

Program:

```
# initialize the list of grades
grades = [85, 90, 78, 92, 88]
```

```
# Display the grades list
```

```
print("Grades List", grades)
```

```
# prompt the user to enter the index of the grade they want to view
```

```
try:
```

```
    index = int(input("Enter the index of the grade you want to view: "))
```

```
    # Attempt to display the grade at the specified index
```

```
    print(f"The grade at index {index} is: {grades[index]}")
```

```
except IndexError
```

```
    # Handle the case where the index is out of range
```

```
    print("Invalid index. Please enter a valid index")
```

~~End~~

Output

Grades List [85, 90, 78, 92, 88]

Enter the index of grade you want to view - 6

Invalid index: Please enter a valid index

VELTECH	
EX No.	
PERFORMANCE	
RESULT AND ANALYSIS	
REMARKS	
RECORD ID	
STATUS	
IN WITH DATE	

```

# Python program to demonstrate Exceptional handling
# Syntax: try:
#         code which may raise an exception
#     except:
#         code which will handle the exception

# Example:
try:
    # Code which may raise an exception
    x = 10/0
except:
    # Code which will handle the exception
    print("Exception occurred")

# Another example:
try:
    # Code which may raise an exception
    x = 10/0
except ZeroDivisionError:
    # Code which will handle the exception
    print("ZeroDivisionError occurred")

# Example with try-except-else:
try:
    # Code which may raise an exception
    x = 10/0
except:
    # Code which will handle the exception
    print("Exception occurred")
else:
    # Code which will execute if no exception occurs
    print("No exception occurred")

# Example with try-except-else-finally:
try:
    # Code which may raise an exception
    x = 10/0
except:
    # Code which will handle the exception
    print("Exception occurred")
else:
    # Code which will execute if no exception occurs
    print("No exception occurred")
finally:
    # Code which will execute regardless of whether an exception occurred or not
    print("Finally block executed")

```

Result:

Thus the python programming implement and Exceptional handling.