## Untitled8

## December 19, 2023

[]: #QUESTION ANSWER (1)

#What is Exception in python

```
#ANSWER= Errors detected during execution are called exceptions and are not
       →unconditionally fatal
      #QUESTION= Write the differen, are between Exceptions and syntax errors
      #ANSWER=
      #EXCEPTION
      """An exception is an abnormal event that occurs during the execution of a_\sqcup
       \hookrightarrowprogram.Exceptions are usually caused by runtime errors.such as trying to \sqcup
       ⇒access a file that does not exist. Exception are not syntax errors,
      but they can still prevent the program from running if they are not handled \sqcup
       ⇔properly."""
      #SYNTAX
      """A syntax error means there's an error in syntax such as misspelled keywords,
      a missing punctuation character, a missing bracket,
      a missing closing parenthesis or any errors in basic framing sequence of \Box
       ⇔characters or
      tokens which is necessarily to be written in a particular programming language.
       _ II II II
[24]: #QUESTION(2)
      #ANSWER=
      "when an exception is not handled properly they can still prevent the program.
       ⇔from running."
      #EXAMPLE
      try:
          f=open("text11.txt",'r')
          f.write("write into my file")
      except Exception as e:
```

```
print("this is my file",e)
```

this is my file [Errno 2] No such file or directory: 'text11.txt'

```
[26]: #QUESTION(3)
#ANSWER
"try and except block are used to catch and handle exceptions."
#EXAMPLE
try:
    f=open("test2.txt",'r')
except Exception as e:
    print("this is my except block",e)
```

this is my except block [Errno 2] No such file or directory: 'test2.txt'

```
[28]: #QUESTION(4)
#1) TRY AND ELSE

try:
    f = open("test6.txt",'r')
    f.write("this is my course")
except Exception as e:
    print("this is my except block",e)
else:
    print("this will be executed once your try will executed without errors")
```

this is my except block [Errno 2] No such file or directory: 'test6.txt'

```
try:
    f = open("text4.txt", 'r')
    f.write("write something")
finally:
    print("finally will executed itself in any situation")
```

finally will executed itself in any situation

```
FileNotFoundError Traceback (most recent call last)

Cell In[29], line 4

1 #2)FINALLY

3 try:
----> 4 f=open("text4.txt",'r')

5 f.write("write something")

6 finally:
```

```
File /opt/conda/lib/python3.10/site-packages/IPython/core/interactiveshell.py:
        →282, in _modified_open(file, *args, **kwargs)
           275 if file in {0, 1, 2}:
                   raise ValueError(
           276
           277
                        f"IPython won't let you open fd={file} by default "
           278
                        "as it is likely to crash IPython. If you know what you are,

doing, "
           279
                        "you can use builtins' open."
           280
                    )
       --> 282 return io_open(file, *args, **kwargs)
       FileNotFoundError: [Errno 2] No such file or directory: 'text4.txt'
[30]: #3)RAISE
      class vaildage(Exception):
          def __init__(self,mes):
              self.mes=mes
[31]: def validatedage(age):
          if age<0:</pre>
              raise vaildage("entered age is negative")
          elif age>200:
              raise vaildage("entered age is very very high")
          else:
              print("age is valid")
[32]: try:
          age=int(input("enter your age"))
          validatedage(age)
      except vaildage as e:
          print(e)
     enter your age 45
     age is valid
[36]: #QUESTION(5)
      #ANSWER
      """Regular classes that inherit from custom Exception make it very easy to_\sqcup
       ⇔create our own custom Exception which can make our programs easier to follow i
       \hookrightarrow and more readable.
      Custom Exception can make your code much more readable and robust, and reduce \sqcup
       \hookrightarrowthe amount of code you write later to try and figure out what exactly went\sqcup
       ⇔wrong."""
```

```
#EXAMPLE
      class validage(Exception):
          def __init__(self,mes):
              self.mes=mes
[37]: def vailidae(age):
          if age<18:
              raise validage("not allow to enter our company")
          elif age >30:
              raise validage("Yes company to allow")
          else:
              print("allow to all in my company")
[38]: try:
          age=int(input("enter our age"))
          vailidae(age)
      except validage as e:
          print(e)
     enter our age 67
     Yes company to allow
[40]: #QUESTION(6)
      # ANSWER
      class passingmark(Exception):
          def __init__(self,quali):
              self.quali=quali
[41]: def passedmark(marks):
          if marks<0:</pre>
              raise passingmark("marked not sufficient for qualifed")
          elif marks>600:
              raise passingmark("mark is very very high")
          else:
              print("over all good")
[19]: try:
          marks=int(input('enterd your mark'))
          passedmark(marks)
      except passingmark as e:
```

## print(e)

enterd your mark 56
over all good