**1.what is exception handling , explain with example?**

An exception is an error that happens during execution of a program. When that

error occurs, Python generate an exception that can be handled, which avoids your

program to crash.

It contains mainly **try** and **except** block

**try** : block is used to excute few instructions and if any error raises that will be captured by **except** block.

**try :**

**print 5+”hello”**

**except :**

**print “bad coding”**

**Error handling also has Else and Finally Block**

**2. what is "finally" keyword , explain with example?**

Finally Block in Error Handling is used to execute required Instructions at the end of program whether errors are excepected or not.

**#!/usr/bin/pyhton**

**try :**

**a=5**

**print a/0**

**except:**

**print a, “can’t be divided by Zero”**

**finally:**

**print “This statement will be executed at the end”**

o/p: 5 can’t be divided by Zero

This statement will be executed at the end

**try :**

**a=5**

**print a/1**

**except:**

**print a, “can’t be divided by Zero”**

**finally:**

**print “This statement will be executed at the end”**

o/p: 5

This statement will be executed at the end

In the both above example either error raised or not ,but finally block statements will be excuted.

**3. how can we raise our own exceptions , explain with example?**

We can raise the error by using key word raise and followed by Error to be raised.

**try :**

**b = input(“enter the number ”)**

**if b==0:**

**raise ZeroDivisionError**

**except zeroDivisionError :**

**print a, “can’t be divided by Zero”**

**finally:**

**print “This statement will be executed at the end”**

**4. diff types of errors , how do you handle them?**

**KeyError exception**

Accessing a non-existence dictionary keys.

**Attribute Error**

Calling non existent method.

**Name Error**

Referencing a non existent variable.

**Type Error**

Mixing Data Types without coercion.

**IOError**

If the file cannot be opened.

**ImportError**

If python cannot find the module

**ValueError**

Raised when a built-in operation or function receives an argument that has the

right type but an inappropriate value

**KeyboardInterrupt**

Raised when the user hits the interrupt key (normally Control-C or Delete)

**EOFError**

Raised when one of the built-in functions (input() or raw\_input()) hits an

end-of-file condition (EOF) without reading any data

**Zero Division Error :**

Dividing a value by zero.

Example for type error

**try:**

**b =raw\_input(“enter the number ”)**

**raise TypeError(b)**

**except TypeError as b :**

**b=int(b)**

**print b+100 , “ your total score”**

**finally:**

**print “This statement will be executed at the end”**or

**5. what is "else" in exception handling , when it will be executed , explain with example?**

**else** block in Error Handling is a conditional statement.

That will be excetued when except block condition doesn’t fall.

If Except block is excuted then else block will not be excuted.

**try :**

**b = input(“enter the number ”)**

**if b==0:**

**raise ZeroDivisionError (“enterd bad Value”)**

**except zeroDivisionError as e:**

**print e**

**print a, “can’t be divided by Zero”**

**else :**

**print “enterd Good Value”**

**finally:**

**print “This statement will be executed at the end”**