Q1. Describe three applications for exception processing.

* Prohibit crashing and stopping the execution of code
* Send proper message to the user
* set some actions to do based on the type of exception

Q2. What happens if you don’t do something extra to treat an exception?

If some exception happens and we don’t handle it properly, the system will crash and the codes after exception will not run. Also, user cannot get proper error message regard to error because some error message is not understandable for simple user and finally, by handling exception we can create log or send message which clearly shows where is the place of error.

Q3. What are your options for recovering from an exception in your script?

The first one is exception handling with the help of Exception class and try…except…else statements, in this case we put the code in try block and if some error occur during executing code, the script will go to except or else blocks and execute the codes which we prepare for error case.

The other one is Assertion which use in assert statement, the condition of assertion will check and if it returns false and exception raise and return the place of error and the assertion message.

Q4. Describe two methods for triggering exceptions in your script.

The first one is using raise with raise [Exception [, args [, traceback]]] structure, this statement can be used in any part of the script by checking a condition.

The second one is creating a class which inherit from one of the Exception classes and customize it based on the needs and again use raise statement with the name of the class to trigger it.

Q5. Identify two methods for specifying actions to be executed at termination time, regardless of whether or not an exception exists.

If the code in try block does not generate any exception and we have else clause in our try block then the code in else clause with run.

The other part of try block in finally clause, the code in this part must run whether the try block raise an exception or not raise any exception.