1. Which of the following is the correct way to open a file in Python for reading?

a) file = open("file.txt", "r")
b) file = open("file.txt", "w")
c) file = open("file.txt", "a")
d) file = open("file.txt", "x")
Answer: a) file = open("file.txt", "r")

2. What happens if you open a file using mode "w" that already exists?

a) It will append data to the file
b) It will raise an error
c) It will overwrite the existing file
d) It will do nothing
Answer: c) It will overwrite the existing file

3. Which method is used to read the entire contents of a file?

a) file.read()
b) file.readlines()
c) file.readline()
d) file.readfile()
Answer: a) file.read()

4. What is the purpose of the "with" statement in file handling?

a) It is used to close the file automatically after file operations
b) It allows you to open multiple files at once
c) It speeds up file reading operations
d) It prevents errors from occurring
Answer: a) It is used to close the file automatically after file operations

5. Which method is used to move the file pointer to a specific position?

a) seek()
b) tell()
c) move()
d) goto()
Answer: a) seek()

6. What is the difference between an error and an exception?

a) Errors occur at runtime, whereas exceptions occur at compile time
b) Errors occur due to invalid syntax, whereas exceptions occur due to logical issues
c) Errors cannot be handled, but exceptions can be handled
d) Both b and c
Answer: d) Both b and c

7. Which of the following is an example of a built-in exception in Python?

a) ZeroDivisionError
b) SyntaxError
c) TypeError
d) All of the above
Answer: d) All of the above

8. What will happen if an exception is not handled in a Python program?

a) The program will terminate abruptly
b) The program will continue execution normally
c) The program will ignore the exception
d) Python will try to fix the exception automatically
Answer: a) The program will terminate abruptly

9. What is the purpose of the finally block in exception handling?

a) It executes only when an exception occurs
b) It executes whether an exception occurs or not
c) It catches multiple exceptions
d) It prevents the program from terminating
Answer: b) It executes whether an exception occurs or not

10. Which keyword is used to raise an exception manually in Python?

a) raise
b) throw
c) error
d) except
Answer: a) raise

1. What is the default mode in which the open() function opens a file?

a) "r" (read mode)
b) "w" (write mode)
c) "a" (append mode)
d) "x" (exclusive creation mode)
Answer: a) "r" (read mode)

2. Which of the following methods is used to read a single line from a file?

a) read()
b) readlines()
c) readline()
d) readfile()
Answer: c) readline()

3. What happens if you open a file in "a" mode?

a) It overwrites the file
b) It appends data to the existing file
c) It deletes the file before writing
d) It only allows reading
Answer: b) It appends data to the existing file

4. What will happen if we attempt to open a non-existent file in "r" mode?

a) A new file is created
b) It raises a FileNotFoundError
c) The program exits normally
d) It returns an empty file object
Answer: b) It raises a FileNotFoundError

5. The close() method is used to:

a) Free up system resources used by the file
b) Delete the file from disk
c) Make the file read-only
d) Append new data to the file
Answer: a) Free up system resources used by the file

6. What is the difference between read() and readlines() methods?

a) read() reads the entire file, whereas readlines() returns a list of lines
b) read() returns a list, whereas readlines() returns a string
c) Both functions return a list
d) read() works only in binary files
Answer: a) read() reads the entire file, whereas readlines() returns a list of lines

7. Which of the following statements about write() and writelines() is true?

a) write() writes a single string, whereas writelines() writes a list of strings
b) writelines() writes one line at a time
c) write() only works in binary mode
d) write() can accept a list of strings
Answer: a) write() writes a single string, whereas writelines() writes a list of strings

8. In Windows, which of the following is a correct way to specify an absolute file path?

a) f = open("C:\\folder\\file.txt")
b) f = open("/home/user/file.txt")
c) f = open("C:/folder/file.txt")
d) Both (a) and (c)
Answer: d) Both (a) and (c)

9. What does the seek() method do in file handling?

a) Closes the file
b) Moves the file pointer to a specific location
c) Reads a specific number of characters
d) Deletes the file
Answer: b) Moves the file pointer to a specific location

10. The tell() method is used for:

a) Reading the next character
b) Returning the current file pointer position
c) Closing the file
d) Writing data to the file
Answer: b) Returning the current file pointer position

11. What type of error is raised if a variable is used before assignment?

a) TypeError
b) ZeroDivisionError
c) NameError
d) ValueError
Answer: c) NameError

12. What is the output of the following code?

python

CopyEdit

```
try:
    print(5/0)
except ZeroDivisionError:
    print("Cannot divide by zero")
```

a) ZeroDivisionError: division by zero
b) Cannot divide by zero
c) 5/0
d) No output
Answer: b) Cannot divide by zero

13. Which block is always executed in exception handling?

a) try
b) except
c) else
d) finally
Answer: d) finally

14. What will the following code output if the user enters a non-numeric value?

python

CopyEdit

```
try:
    x = int(input("Enter a number: "))
except ValueError:
    print("Invalid input")
```

a) Program crashes
b) Nothing happens
c) "Invalid input"
d) "Enter a number:"
Answer: c) "Invalid input"

15. Which of the following is NOT a built-in exception in Python?

a) FileNotFoundError
b) KeyboardInterrupt
c) OutOfMemoryError
d) SyntaxError
Answer: c) OutOfMemoryError

16. What does the else block in exception handling do?

a) Executes only when an exception occurs
b) Executes only if no exception occurs
c) Executes regardless of exceptions
d) Used for handling multiple exceptions
Answer: b) Executes only if no exception occurs

17. How do you manually raise an exception in Python?

a) raise Exception("Error")
b) throw Exception("Error")
c) except Exception("Error")
d) error Exception("Error")
Answer: a) raise Exception("Error")

18. What will happen if an exception occurs in a try block but no except block is provided?

a) The program continues normally
b) The program crashes with a traceback error
c) The program automatically handles the exception
d) The program prints "Exception occurred"
Answer: b) The program crashes with a traceback error

19. What is a user-defined exception?

a) An exception that is already built into Python
b) An exception created by the user by defining a new class
c) A syntax error
d) A runtime error
Answer: b) An exception created by the user by defining a new class

20. What will the following code output?

python

CopyEdit

```
try:
    raise ValueError("Custom Error")
except ValueError as e:
    print(e)
```

a) "Custom Error"
b) ValueError
c) raise ValueError("Custom Error")
d) No output
Answer: a) "Custom Error"

1. What will happen if you open a file in 'x' mode and the file already exists?

a) The file will be overwritten
b) The file will be opened in append mode
c) An error will be raised
d) The file will be deleted and recreated
Answer: c) An error will be raised

2. What is the output of the following code?

python

CopyEdit

```
f = open("sample.txt", "w")

f.write("Hello, World!")

f.close()

f = open("sample.txt", "r")

print(f.read())
```

a) Hello, World!
b) An error will occur
c) sample.txt
d) None
Answer: a) Hello, World!

3. Which method is used to read an entire file as a string?

a) readlines()
b) read()
c) readline()
d) fetch()
Answer: b) read()

4. How do you open a file for both reading and writing?

a) "rw"
b) "r+"
c) "w+"
d) "a+"
Answer: b) "r+"

5. What does the "rb" mode do when opening a file?

a) Opens the file in read mode
b) Opens the file in binary mode
c) Opens the file in read and binary mode
d) None of the above
Answer: c) Opens the file in read and binary mode

6. What will the following code output?

python

CopyEdit

```
f = open("file.txt", "w")
f.write("Python")
f.seek(0)
f.write("Java")
f.close()
f = open("file.txt", "r")
print(f.read())
```

a) Javaon
b) Python
c) Javathon
d) PythonJava
Answer: a) Javaon

7. Which function returns the current file pointer position?

a) position()
b) seek()
c) tell()
d) pointer()
Answer: c) tell()

8. What will happen if we open a file using 'a' mode and then try to read it?

a) The file will be read normally
b) The file will be overwritten
c) An error will occur
d) The file pointer will be at the end of the file
Answer: d) The file pointer will be at the end of the file

9. What does the following code do?

python

CopyEdit

```
with open("test.txt", "r") as f:
    data = f.read()
```

a) It opens the file and closes it automatically after reading
b) It reads the file but does not close it
c) It throws an error if the file does not exist
d) Both (a) and (c)
Answer: d) Both (a) and (c)

10. Which of the following statements about writelines() is true?

a) It writes a list of strings to a file
b) It adds a newline character automatically
c) It writes one character at a time
d) None of the above
Answer: a) It writes a list of strings to a file

11. What type of error is caused by dividing by zero?

a) ValueError
b) ZeroDivisionError
c) SyntaxError
d) ArithmeticError
Answer: b) ZeroDivisionError

12. Which of the following will NOT raise an exception?

a) int("hello")
b) 5 / 0
c) print(10 / 2)
d) open("non_existent.txt")
Answer: c) print(10 / 2)

13. What is the purpose of the except block?

a) To define a function
b) To handle errors that occur in a try block
c) To execute code only if no exceptions occur
d) None of the above
Answer: b) To handle errors that occur in a try block

14. What will the following code output?

python

CopyEdit

```
try:
    print(10 / 0)
except ZeroDivisionError:
    print("Cannot divide by zero")
else:
    print("No error occurred")
```

a) 10 / 0
b) "Cannot divide by zero"
c) "No error occurred"
d) None
Answer: b) "Cannot divide by zero"

15. Which statement about the finally block is correct?

a) It executes only if an exception occurs
b) It executes only if no exception occurs
c) It always executes
d) It never executes
Answer: c) It always executes

16. What does the raise keyword do in Python?

a) Catches an exception
b) Creates a new exception
c) Manually triggers an exception
d) Suppresses an exception
Answer: c) Manually triggers an exception

17. What will happen if an exception occurs in the try block but there is no matching except block?

a) The program continues execution
b) The program stops and an error message is displayed
c) The program automatically fixes the error
d) The else block executes
Answer: b) The program stops and an error message is displayed

18. How can we handle multiple exceptions in a single except block?

a) Using multiple except blocks
b) Using a tuple of exception types
c) Using a try block inside an except block
d) We cannot handle multiple exceptions
Answer: b) Using a tuple of exception types

19. What happens if an exception occurs inside an else block?

a) The exception is ignored
b) The program crashes
c) The except block executes
d) The finally block executes
Answer: b) The program crashes

20. What is a user-defined exception?

a) An exception created by the user by defining a new class
b) A built-in exception in Python
c) An error raised by Python itself
d) A syntax error
Answer: a) An exception created by the user by defining a new class

1. What is the default encoding used when opening a file in text mode in Python?

a) UTF-8
b) ASCII
c) UTF-16
d) ISO-8859-1
Answer: a) UTF-8

2. What will the following code do?

python

CopyEdit

```
f = open("data.txt", "w")

f.write("Hello")

f.close()

f = open("data.txt", "a")

f.write(" World")

f.close()

f = open("data.txt", "r")

print(f.read())
```

a) Hello
b) Hello World
c) World
d) An error occurs
Answer: b) Hello World

3. What does buffering=0 mean in file operations?

a) No buffering is used, and data is written immediately
b) Data is written after closing the file
c) Data is stored in memory before writing
d) The file is read in chunks
Answer: a) No buffering is used, and data is written immediately

4. What will happen if you try to write to a file opened in 'r' mode?

a) It will overwrite the file
b) It will raise an error
c) It will append data to the file
d) The data will be written, but not saved
Answer: b) It will raise an error

5. What is the advantage of using the "with" statement when handling files?

a) It ensures the file is closed automatically
b) It speeds up file reading
c) It prevents syntax errors
d) It prevents writing to the file
Answer: a) It ensures the file is closed automatically

6. Which method reads a file line by line?

a) read()
b) readline()
c) readlines()
d) readfile()
Answer: b) readline()

7. What will the following code output?

python

CopyEdit

```
f = open("data.txt", "w")

f.writelines(["Line1\n", "Line2\n"])

f.close()

f = open("data.txt", "r")

print(f.readlines())
```

a) ["Line1", "Line2"]
b) ["Line1\n", "Line2\n"]
c) ["Line1 Line2"]
d) An error occurs
Answer: b) ["Line1\n", "Line2\n"]

8. If a file does not exist, which mode will create a new file?

a) "r"
b) "w"
c) "r+"
d) "rb"
Answer: b) "w"

9. What will seek(0, 2) do in a file?

a) Move the pointer to the beginning of the file
b) Move the pointer to the end of the file
c) Move the pointer to the second character
d) Raise an error
Answer: b) Move the pointer to the end of the file

10. What will tell() return immediately after opening a file in read mode?

a) -1
b) 0
c) None
d) The total size of the file
Answer: b) 0

11. Which of the following errors occur due to incorrect syntax?

a) ZeroDivisionError
b) SyntaxError
c) TypeError
d) ValueError
Answer: b) SyntaxError

12. Which exception is raised when trying to open a file that does not exist?

a) FileNotFoundError
b) IOError
c) TypeError
d) IndexError
Answer: a) FileNotFoundError

13. Which statement is used to handle exceptions in Python?

a) catch
b) try-except
c) try-catch
d) error
Answer: b) try-except

14. What is the output of the following code?

python

CopyEdit

```
try:
    print(10 / 0)
except ZeroDivisionError:
    print("Cannot divide by zero")
finally:
    print("Execution completed")
```

a) "Cannot divide by zero"
b) "Execution completed"
c) "Cannot divide by zero", "Execution completed"
d) An error occurs
Answer: c) "Cannot divide by zero", "Execution completed"

15. Which of the following is NOT an exception type in Python?

a) ValueError
b) KeyError
c) ArrayOutOfBoundsException
d) AttributeError
Answer: c) ArrayOutOfBoundsException

16. What is the output of the following code?

python

CopyEdit

```
try:
    num = int("abc")
except ValueError as e:
    print(e)
```

a) ValueError
b) invalid literal for int() with base 10: 'abc'
c) "abc"
d) None
Answer: b) invalid literal for int() with base 10: 'abc'

17. Which of the following statements is true about the finally block?

a) It executes only if an exception occurs
b) It executes only if no exception occurs
c) It always executes, regardless of exceptions
d) It prevents exceptions from occurring
Answer: c) It always executes, regardless of exceptions

18. How do you define a custom exception in Python?

a) By creating a new class that inherits from Exception
b) By using the raise keyword
c) By using def Exception()
d) By writing an if condition
Answer: a) By creating a new class that inherits from Exception

19. What does the following code output if the user enters a string instead of a number?

python

CopyEdit

```
try:
    x = int(input("Enter a number: "))
except ValueError:
    print("Invalid number")
else:
    print("Valid number")
```

a) "Invalid number"
b) "Valid number"
c) None
d) An error occurs
Answer: a) "Invalid number"

20. What is the best way to catch multiple exceptions in Python?

a) Using multiple except blocks
b) Using a single except block with a tuple of exception types
c) Using the else block
d) Ignoring the exceptions
Answer: b) Using a single except block with a tuple of exception types