APPLICATION DEVELOPMENT USING PYTHON

Question Bank:

Answer in Short:

1. Why does this expression cause an error? How can you fix it?
   'I have eaten ' + 99 + ' burritos.'
2. What can you press if your program is stuck in an infinite loop?
3. What statement creates a function?
4. What happens to variables in a local scope when the function call returns?
5. What does spam[int('3' * 2) / 11] evaluate to?
6. What does spam[-1] evaluate to?
7. What does spam[:2] evaluate to?
8. How can you trim whitespace characters from the beginning or end of a string?
9. What is the function that creates Regex objects?
10. What does the search() method return?
11. How do you get the actual strings that match the pattern from a Match object?
12. In the regex created from r'(\d\d\d)-(\d\d\d-\d\d\d\d)', what does group 0 cover? Group 1? Group 2?
13. What is the difference between the + and * characters in regular expressions?
14. What is the difference between {3} and {3,5} in regular expressions?
15. How do you make a regular expression case-insensitive?
16. What is the difference between .* and .*??
17. What do the os.getcwd() and os.chdir() functions do?
18. What is the difference between the read() and readlines() methods?
19. What is an RGBA value?
20. How can you get the RGBA value of 'CornflowerBlue' from the Pillow module?
21. What is a box tuple?
22. What function returns an Image object for, say, an image file named zophie.png?
23. How can you find out the width and height of an Image object's image?
24. What method would you call to get Image object for a 100×100 image, excluding the lower left quarter of it?
25. After making changes to an Image object, how could you save it as an image file?

Answer in detail(7 amrks)

1. Explain different operators used in python.
2. What are the decision control statements in python?
3. What are the different loops used in python? Explain break and continue.
4. Explain string concatenation and replication.
5. Explain exception handing in python.
6. Explain Augmented assignment operator.
7. Explain the list methods : append(),insert(),remove(),sort()

8. Differentiate between dictionary and list.
9. Explain any 7 string methods.
10. Explain pattern matching with regular expressions.
11. What is matching multiple pattern with the group? Explain with example.
12. Explain Optional matching with the question mark.
13. What is Pattern matching with zero or more and one or more? Explain.
14. Explain pattern matching with Specific repetitions.
15. Explain Greedy and nongreedy matching.
16. Differentiate between findall() and search().
17. What are the different pattern matching character classes? Explain.
18. How do you make your own character set explain.
19. Explain caret(^) and dollar ($) with example.
20. Explain wildcard character with example.
21. List all the regex symbols with exmples.
22. Explain case-insensitive matching.
23. what is the regex string method used for substituting string? Explain.
24. Explain complex regexes with example.
25. What is re.IGNORECASE, re.DOTALL, and re.VERBOSE? Explain.
26. Explain the process of copying,moving and renaming files using shutil module.
27. Explain reading,creating,adding and extracting zip files with example.
28. What are the different modules used to scrape webpages in python? Explain.
29. How do you Parse HTML with BeautifSoup Mpdule? Explain.
30. Explain controlling the browser with the Selenium module.
31. Explain the process of reading Excel documents with example.
32. How do you extract text from pdf and word documents using python.
33. What are the procedures for Connecting to an SMTP Server?
34. Explain the process of sending an email using
35. How do you manipulate Images with Pillow.

Application Questions:

1. Write a program Magic 8 ball with list.
2. Write a password locker program.
3. Write a program to extract phone number and email address using Regex.
4. Program to generate random quiz file of guessing state capitals.
5. Write a program to download all XKCD Comics to a drive.
6. Write a program to read an image, Colouring and cropping image using Pillow module.