

# Computer Principles/Unix

1. What was the name of the first internet, which was developed in the late 1960s?
  - A. World Wide Web (WWW)
  - B. ARPANET
  - C. Internet Explorer
  - D. Netscape Navigator
2. What unique numerical labels are assigned to devices on a network to identify them?
  - A. Routers
  - B. Clients
  - C. IP Addresses
  - D. ISPs
3. What is the primary purpose of the "cd" command in Unix?
  - A. Copy files and directories
  - B. Delete files and directories
  - C. Change the working directory
  - D. List the contents of a directory
  - E. View file permissions
4. Which command is commonly used to create a new directory in Unix?
  - A. ls
  - B. cat
  - C. touch
  - D. mkdir
  - E. cp

# Operating Systems

5. What is the primary difference between hardware and software?
  - A. Hardware is the physical component of a computer, while software is the set of instructions that run on the hardware.
  - B. Software is tangible and can be physically touched, while hardware consists of only code.
  - C. Hardware consists of applications, while software includes devices like the CPU and RAM.

6. What is the i6 server that students have access to?
  - A. A cloud-based Windows server for hosting websites
  - B. A Linux-based server where students have directories for development work
  - C. A MacOS development environment pre-installed on all student computers
  - D. A virtual machine for running Python scripts only
  
7. The only way to access the i6 server is through Cyberduck.
  - A. True
  - B. False
  
8. Which of the following best describes the difference between a Command Line Interface (CLI) and a Graphical User Interface (GUI)?
  - A. CLI is only used by programmers, while GUI is for non-technical users.
  - B. GUI is faster than CLI for all tasks.
  - C. CLI is text-based and requires typing commands, while GUI is visual and uses icons and menus.
  - D. CLI is a type of hardware, while GUI is software.
  
9. What is the purpose of SSH (Secure Shell)?
  - A. To compress and archive files
  - B. To format and partition a hard drive
  - C. To switch between different users on a Unix system
  - D. To securely access a remote server over a network

# HTML

10. What does HTML stand for?

- A. Hyper Transfer Text Language
- B. High Tech Markup Language
- C. Hyperlink and Text Markup Language
- D. Hypertext Markup Language

11. Which of the following best describes a markup language?

- A. A language used to style the visual appearance of web pages.
- B. A programming language used to write server-side code.
- C. A language that uses tags to structure and format content in a document.

12. Which of the following best describes a block-level element?

- A. It is used to style text without affecting the document's layout.
- B. It is always displayed in a new line and takes up the full width available.
- C. It does not start on a new line and only takes up as much width as necessary.

13. Select all inline elements

- A. a
- B. br
- C. em
- D. p
- E. img

14. In which scenario would it be most appropriate to use a `<span>` tag?

- A. To create a container for an entire section of a webpage.
- B. To style a small portion of text within a paragraph, such as making a single word bold.
- C. To define the main content area of a webpage.
- D. To create a navigation bar.

15. Which type of link is recommended for connecting internal pages within the same website?

- A. Absolute link
- B. Relative link
- C. External link
- D. Dynamic link

# CSS

16. What is the primary purpose of CSS in web development?
- A. To create dynamic server-side scripts
  - B. To define the structure of a web page
  - C. To manage the layout and presentation of web content
  - D. To process user input in forms
17. What is the purpose of the CSS cascade?
- A. To determine the order of properties in a CSS file.
  - B. To resolve conflicts between conflicting CSS rules.
  - C. To control the flow of text within a webpage.
18. Which of the following selectors has the highest specificity?
- A. Element selectors
  - B. ID selectors
  - C. Class selectors
19. What CSS property is used to control the spacing between the content and the border of an element?
- A. padding
  - B. margin
  - C. space-between
20. What does the box-sizing: border-box; CSS property do?
- A. Includes the element's padding and border in its total width and height.
  - B. Applies a border around the element's content.
  - C. Sets the display style of the element to a block-level element.
21. Which of the following properties is used to create flexible layouts in CSS?
- A. flex-direction
  - B. position
  - C. display
22. Which property defines how a flex container's children are positioned along the main axis?
- A. align-items
  - B. justify-content
  - C. flex-grow
  - D. flex-wrap

23. In the HSL color model used in CSS, what does the 'H' stand for?

- A. Height
- B. Hue
- C. Highlight
- D. Hexadecimal

24. In CSS, what does the pseudo-class ":hover" represent?

- A. Active links
- B. Visited links
- C. Links on focus
- D. Elements when a mouse pointer hovers over them

25. Which selector applies styles to every a inside of nav?

- A. nav, a { color: red; }
- B. nav > a { color: red; }
- C. a nav { color: red; }
- D. nav a { color: red; }

26. When using percentages (%) in CSS, what does the percentage value depend on?

- A. The element's computed width and height
- B. The size of the parent element, but only if the parent has an explicit size for that property
- C. The size of the nearest positioned ancestor
- D. The browser's default font size

27. If the base font size of a document is 16px, what is the computed font size of .child in pixels? (.parent is the parent of .child).

```
.parent { font-size: 20px; }  
.child { font-size: 2em; }
```

- A. 16px
- B. 20px
- C. 32px
- D. 40px
- E. Cannot be determined

# Web Graphics

28. What is the primary difference between raster and vector graphics?

- A. Raster graphics are resolution-independent, while vector graphics have fixed resolutions.
- B. Raster graphics are composed of pixels, while vector graphics are made up of mathematical shapes and paths.
- C. Raster graphics are suitable for scaling without loss of quality, while vector graphics are not.
- D. Raster graphics are more suitable for printing, while vector graphics are better for digital display.

29. Which graphic format is most appropriate for an image of a sunset with varying shades of color?

- A. BMP
- B. GIF
- C. Vector
- D. JPEG

30. Which of the following file formats is commonly used for vector graphics?

- A. JPEG
- B. PNG
- C. SVG
- D. GIF
- E. None of the above

31. Which color mode is used for professional printing?

- A. RGB
- B. CMYK
- C. Grayscale
- D. Duotone

32. Which of the following is true about the RGB color mode?

- A. It is used for print media.
- B. It is an additive color model.
- C. The values for RGB are a number between 0 and 100.

33. Which of the following is true about the srcset attribute in HTML?

- A. It is used to provide alternative text for images

- B. It allows you to specify multiple image sources for different screen resolutions
- C. It is used to define alternate image formats

34. What is the purpose of the <defs> element in SVG?

- A. It defines the overall size of the SVG canvas.
- B. It stores reusable elements like gradients, patterns, and symbols.
- C. It applies default styles to all elements inside an SVG.
- D. It automatically renders any shape defined within it.

## In Reference to Attached Code

35. What is the “parent” element of the <ol> element?

- A. <main>
- B. <img>
- C. <div id="container">
- D. <section class="col1">
- E. <body>

36. How will the ordered list and caption be positioned in relation to image on the website?

- A. To the right side of the image in a three column layout
- B. To the left side of the image in a three column layout
- C. They will be positioned beneath the image
- D. They will be positioned above the image

37. Which of the following best describes the size of the web page’s image?

- A. The image is 100% of the width of the browser window
- B. The image is 300px wide
- C. The image is 345.6px wide
- D. The image is 720px wide

38. List items on the website will be...

- A. Numbered
- B. Lettered
- C. Bullet-pointed

39. How will the two paragraphs in `<section class="col2">` be positioned in relation to one another?
- A. Side by side
  - B. One on top of the other
40. How does the size of the first-level heading compare to the size of the footer text?
- A. They're the same size
  - B. The heading text is 2x larger than the footer text
  - C. The heading text is 1.4x larger than the footer text
  - D. The heading text is 130% larger than the footer text
41. What kind(s) of styles are being applied to this page?
- A. An external style sheet only
  - B. An internal style sheet only
  - C. An external style sheet and internal style sheet
  - D. An external style sheet and inline styles
  - E. None of the above
42. From the code, it can be inferred that the stylesheet is located where?
- A. In a parent directory called "styles"
  - B. In the same directory as this HTML document
  - C. In a separate subdirectory
43. How will a visitor be able to distinguish the page's hyperlink text from paragraph text?
- A. It will be underlined
  - B. It will be blue and underlined
  - C. It will be blue
  - D. Hyperlink text has not been distinguished
44. The first level heading on the page will display in the font, Arial.
- A. True
  - B. False
45. What will the color of paragraph text be?
- A. black
  - B. `rgb(0, 0, 0)`
  - C. `#1b1b1b`
  - D. A and B
  - E. None of the above



