

# Midsem SAFE Quiz

- Syllabus
  - Unix Command Line
  - Bash Scripting
  - Sed-Awk
  - HTML, CSS, Javascript
  - Git
- Correct answers are shown in green color.



Exit

Q1 of 10

Q2 of 10

Q3 of 10

Q4 of 10

Question: 1

Marks: 0.0 / 2.0

Which of the following is true of git, select all that apply.

- ☒ A. Git is based on a centralized architecture
- ☐ B. Users can directly edit files in the repository
- ☐ C. Git “checkout” command pulls from origin repository
- ☐ D. Git “commit” can commit files from both the working directory as well as staging area to the repository as per specified options

Answer Explanation:





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Question: 2

Marks: 2.0 / 2.0

Which of the following is true of git, select all that apply.

- ☐ Git status can show the commit history of a file
- ☐ git show :file1.txt shows the content of file1.txt in the HEAD commit
- ☒ git diff <commit>: shows the diff between the current working directory and the <commit>
- ☐ The command “git branch” creates a new branch
- ☐ Once you do git merge of a branch to a master, the branch is deleted!

Answer Explanation:





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Question: 3

Marks: 2.0 / 2.0

Which of the following is true of HTML? Select all that apply

- ☐ In the code: `<p style="color:red;">This is a red paragraph.</p>`; `</p>` is an attribute
- ☒ `<p>` does not preserve spaces and breaklines in the paragraph
- ☐ `#` is used to comment a line
- ☒ `<a>` element is used to define links
- ☐ `<td>` is used to specify headers in a table

Answer Explanation:





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Question: 4

Marks: 2.0 / 2.0

Which of the following is true of CSS/Javascript? Select all that apply

- ☐ `<style>` element links to an external CSS file
- ☐ The browser considers whatever is written between `<code>` and `</code>` tags as Javascript code and runs it
- ☒ `<noscript>` tag defines an alternate content to be displayed to users that have disabled scripts in their browser
- ☒ In javascript, `document.getElementById(...)` gets the element that matches the id
- ☐

Answer Explanation:





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Question: 5

Marks: 2.0 / 2.0

Which of the following is true of awk? Select all that apply

- ☒ The built-in variable FS is input field separator
- ☐ The begin segment is compulsory in awk
- ☐ Default record separator is space
- ☒ \$0 represents the entire record line awk is processing

Answer Explanation:





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Question: 6

Marks: 2.0 / 2.0

Suppose `cat list | wc -l` at a terminal prints 16; what would `sed '1,5p' list | wc -l` print?

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21

**Answer: 21.0 - 21.0****Answer Explanation:**



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Question: 7

Marks: 0.0 / 2.0

Which of the following is true of bash? Select all that apply.

- ☐ A file abc.sh which has permissions -rw-rw-r-- can be run by typing ./abc.sh in the folder the file is in.
- ☒ \$# specifies the number of arguments given to a bash script
- ☒ Arrays are declared via -a command
- ☒ If a bash script calls another bash script (child) from within, all the variables are automatically exported and available for use within the child

Answer Explanation:







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Question: 8

Marks: 2.0 / 2.0

Suppose in a bash script you assign a variable as given below; note there are 4 spaces between abc and 123. Which of the following will print the same exact string with the correct number of spaces? Select all that apply

`x="abc 123"`

- 
- ☐ `echo x`
  - ☐ `echo $x`
  - ☒ `echo "$x"`
  - ☐ `echo '$x'`

**Answer Explanation:**





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Question: 9

Marks: 2.0 / 2.0

Which of the following are true of unix command line arguments? Select all that apply.

- ☐ su is used to prefix a specific command that has to be run with superuser privileges
- ☐ In regex, “?” Match the preceding item zero or more times
- ☐ “which” command specifies the version of a given command
- ☒ “find” command locates files/directories with known pattern
- ☒ Standard error file descriptor is 2
- ☐

Answer Explanation:





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Question: 10

Marks: 0.0 / 2.0

Suppose you are user kc and you are inside your home directory. Within the directory there is a path for folder cs104/unix/commands/. If you want to land inside the commands folder, which all will work from the home directory?

- ☐ cd commands
- ☒ cd ~/cs104/unix/commands
- ☒ cd /home/cs104/unix/commands
- ☒ cd cs104/unix/commands

**Answer Explanation:**

# Endsem SAFE Quiz

- Syllabus
  - Basic Python
  - Advanced Python (Numpy + Matplotlib)
  - GDB, Make
  - Latex
  - Spreadsheet
  - Doxygen
- Correct answers are already marked by a tick or bold dot, except for Q3, where the correct answer is in **green**.



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Question: 1

Marks: 1.0 / 1.0

Which tag is used in doxygen to provide a description of a file or function?

- ☐ “@file”
- ☒ “@brief”
- ☐ “@desc”
- ☐ “@para”

Answer Explanation:





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Question: 2

Marks: 1.0 / 1.0

Which of the following is true of Latex? Select all that apply.

- ☐ The .bbl file contains entries such as @book, @article etc
- ☐ `\emph{argument}` always uses italicized font to emphasize text
- ☒ `\begin{itemize}` uses a bulleted list
- ☒ `\begin{equation}` method not only prints the equation in a newline but also numbers it.

Answer Explanation:





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Question: 3

Marks: 0.0 / 1.0

Which of the following is true of spreadsheets? Select all that apply.

- 
- ☐ Command Ctrl+" shows all the formulas on a spreadsheet
  - ☒ "count" function counts cells with numbers as well as character/strings
  - ☒ "IF" function (=IF) has 3 arguments (not countif or sumif, just plain if)
  - ☐ In "vlookup", the key (i.e. lookup value) can be any column in the specified table array

Answer Explanation:





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Question: 4

Marks: 1.0 / 1.0

Which of the following is true of debugging? Select all that apply.

- ☐ When using assertions in a program, the program stops with an informational message whenever the asserted condition passes
- ☐ Command “run” takes you from one breakpoint to the next
- ☒ “print” command not only prints a variable, but can be used to evaluate expressions, reassign variables
- ☐ To use gdb, when compiling you need to use the -gdb flag (e.g. g++ -gdb -o test test.cpp)

Answer Explanation:







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Question: 5

Marks: 1.0 / 1.0

Which of the following is true of python? Select all that apply.

- ☐ Python is a compiled language
- ☒ Indentation is used to define a block of code
- ☐ Single line comments use %
- ☒ "subplot" command in matplotlib takes 3 arguments

**Answer Explanation:**





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Question: 6

Marks: 1.0 / 1.0

Which of the following is true of debugging? Select all that apply.

- ☐ The command “list” shows where the current breakpoints are
- ☐ The command “step” will step over function calls
- ☒ The command “backtrace” prints the current functions on the stack
- ☒ Profiling is enabled as follows via the -pg flag (e.g.) `g++ -pg -o profile profile.cpp`

**Answer Explanation:**





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Question: 7

Marks: 1.0 / 1.0

Which among the following allows duplicate members?  
Select all that apply.

- 
- ☒ List
  - ☒ Tuple
  - ☐ Set
  - ☐ Dictionary

**Answer Explanation:**



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Question: 8

Marks: 1.0 / 1.0

What is the output of below code?

```
import numpy as np  
a = np.arange(10)  
print(a[2:5])
```

☒ [2,3,4]☐ [0,1,2]☐ [5,6,7]☐ [2,4,6]

Answer Explanation:





Exit

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Question: 9

Marks: 1.0 / 1.0

Which of the following is true of make? Select all that apply.

- ☐ Against every target, dependencies MUST be specified
- ☐ make command looks for a file named cmake
- ☒ Adding the flag -k when running make helps continue running commands even in the face of errors
- ☐ In the makefile, commands need to start with a space

Answer Explanation:





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Question: 10

Marks: 1.0 / 1.0

How many cells are covered by the range C4:D7 in a spreadsheet?

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8

**Answer: 8.0 - 8.0****Answer Explanation:**