

# Topic 105: (4) Shells and Shell Scripting

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## 105.1 (4) Customize and use the shell environment

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### Question: 4

Which command makes the shell variable named VARIABLE visible to subshells?

- A. export \$VARIABLE
- B. export VARIABLE
- C. set \$VARIABLE
- D. set VARIABLE
- E. env VARIABLE

**Answer: B**

### Question: 9

Which of the following commands puts the output of the command date into the shell variable

mydate?

- A. mydate="\$(date)"
- B. mydate="exec date" C.  
mydate="\$((date))"
- D. mydate="date"
- E. mydate="\${date}"

**Answer: A**

### Question: 10

Which of the following files, when existing, affect the behavior of the Bash shell? (Choose TWO correct answers.)

- A. ~/.bashconf
- B. ~/.bashrc
- C. ~/.bashdefaults
- D. ~/.bash\_etc
- E. ~/.bash\_profile

**Answer: B, E**

### **Question: 12**

How can the existing environment variable FOOBAR be suppressed for the execution of the script./myscript only?

- A. unset -v FOOBAR;./myscript
- B. set -a FOOBAR="";./myscript
- C. env -u FOOBAR ./myscript
- D. env -i FOOBAR ./myscript

**Answer: C**

### **Question: 14**

What output will the following command produce?

seq 1 5 20

- A. 1 6 11 16
- B. 1 5 10 15
- C. 1 2 3 4
- D. 2 3 4 5
- E. 5 10 15 20

**Answer: A**

### Question: 16

Which of the following commands lists all defined variables and functions within Bash?

- A. env
- B. set
- C. env -a
- D. echo \$ENV

**Answer: B**

### Question: 18

What is the purpose of the file /etc/profile?

- A. It contains the welcome message that is displayed after login.
- B. It contains security profiles defining which users are allowed to log in.
- C. It contains environment variables that are set when a user logs in.
- D. It contains default application profiles for users that run an application for the first time.

**Answer: C**

### Question: 19

What command displays all aliases defined in the current shell? (Specify the command without any path information)

**Answer: alias, alias -p**

### Question: 20

Which of the following are requirements in order to run a shell script like a regular command from anywhere in the filesystem? (Choose THREE correct answers.)

- A. The user issuing the command must be in the group script.
- B. The script file must be found in the \$PATH.

- C. The script file must have the executable permission bit set.
- D. The script must begin with a shebang-line (!) that points to the correct interpreter.
- E. The file system on which the script resides must be mounted with the option scripts.

**Answer: B, C, D**

### **Question: 24**

Which of the following is the best way to list all defined shell variables?

- A. env
- B. set
- C. env -a
- D. echo \$ENV

**Answer: B**

### **Question: 25**

Which command allows you to make a shell variable visible to subshells?

- A. export \$VARIABLE
- B. export VARIABLE
- C. set \$VARIABLE
- D. set VARIABLE
- E. env VARIABLE

**Answer: B**

### **Question: 27**

What benefit does an alias in bash provide?

- A. It provides faster lookups for commands in the system directory.
- B. It creates a local copy of a file from another directory.

- C. It hides what command you are running from others.
- D. It allows a string to be substituted for the first word of a simple command.

**Answer: D**

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## 105.2 (4) Customize or write simple scripts

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### Question: 1

What output will the following command sequence produce?

```
echo '1 2 3 4 5 6' | while read a b c; do
```

```
echo result: $c $b $a;
```

```
done
```

A. result: 3 4 5 6 2 1 B. result: 1 2 3 4 5 6

C. result: 6 5 4

D. result: 6 5 4 3 2 1

E. result: 3 2 1

**Answer: A**

### Question: 2

When the command `echo $?` outputs 1, which of the following statements is true?

A. It is the process ID of the echo command.

B. It is the process ID of the current shell.

C. It is the exit value of the command executed immediately before echo.

D. It is the exit value of the echo command.

**Answer: C**

### Question: 5

What output will the command `seq 10` produce?

A. A continuous stream of numbers increasing in increments of 10 until stopped.

B. The numbers 1 through 10 with one number per line.

C. The numbers 0 through 9 with one number per line.

D. The number 10 to standard output.

**Answer: B**

### **Question: 8**

After issuing:

```
function myfunction { echo $1 $2 ; }
```

in Bash, which output does:

```
myfunction A B C
```

Produce?

A. A B

B. A B C

C. A C D. B C

E. C B A

**Answer: A**

### **Question: 11**

What is the difference between the commands `test -e path` and `test -f path`?

A. They are equivalent options with the same behaviour.

B. The `-f` option tests for a regular file. The `-e` option tests for an empty file.

C. Both options check the existence of the path. The `-f` option also confirms that it is a regular file.

D. The `-f` option tests for a regular file. The `-e` option tests for an executable file.

**Answer: C**

### **Question: 13**

When the command `echo $$` outputs 12942, what is the meaning of 12942?

A. It is the process ID of the echo command.

B. It is the process ID of the current shell.



- C. It is the process ID of the last command executed.
- D. It is the process ID of the last command which has been placed in the background.

**Answer: B**

### **Question: 14**

What output will the following command produce?

`seq 1 5 20`

- A. 1 6 11 16
- B. 1 5 10 15
- C. 1 2 3 4
- D. 2 3 4 5
- E. 5 10 15 20

**Answer: A**

### **Question: 20**

Which of the following are requirements in order to run a shell script like a regular command from anywhere in the filesystem? (Choose THREE correct answers.)

- A. The user issuing the command must be in the group script.
- B. The script file must be found in the \$PATH.
- C. The script file must have the executable permission bit set.
- D. The script must begin with a shebang-line (!) that points to the correct interpreter.
- E. The file system on which the script resides must be mounted with the option scripts.

**Answer: B, C, D**

### **Question: 28**

You are looking into a new script you received from your senior administrator. In the very first line you notice a `#!` followed by a file path. This indicates that:

- A. The file at that location was used to make the script.
- B. This script provides identical functionality as the file at that location.
- C. This script will self-extract into a file at that location.
- D. The program at that location will be used to process the script.

**Answer: D**

### **Question: 29**

What keyword is missing from this code sample of a shell script?

```
____ i in *.txt; do  
  
echo $i  
  
done
```

- A. for
- B. loop
- C. until
- D. while

**Answer: A**

### **Question: 187**

Which of the following comparison operators for test work on elements in the file system? (Choose two.)

- A . -z
- B. - eq
- C . -d
- D. -f
- E . -lt

**Answer: C,D**

**Question: 188**

What is the echo \$\$ command?

- A. The process ID of the current shell.
- B. The process ID for the following command.
- C. The process ID of the last command executed.
- D. The process ID of the last command which has been placed in the background.
- E. The process ID of the echo command.

**Answer: A**

**Question: 189**

What output is produced by the following command sequence?

```
echo '1 2 3 4 5 6' | while read a b c; do
```

```
echo result $c $b $a;
```

```
done
```

- A. result: 6 5 4
- B. result: 1 2 3 4 5 6
- C. result: 3 4 5 6 2 1
- D. result: 6 5 4 3 2 1
- E. result: 3 2 1

**Answer: C**