

To do



Activity

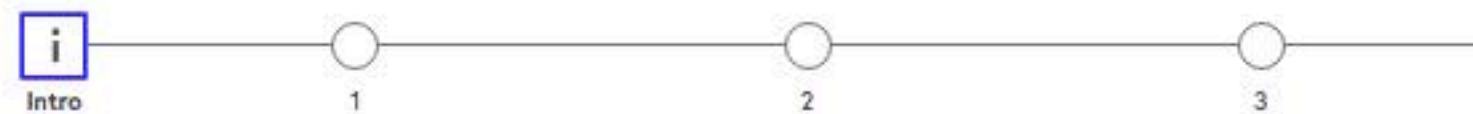


Progress

2.20

4 MORE STEPS TO GO

Checking your progress



This quiz aims to consolidate your knowledge about failure propagation and trapping exits.

QUIZ RULES

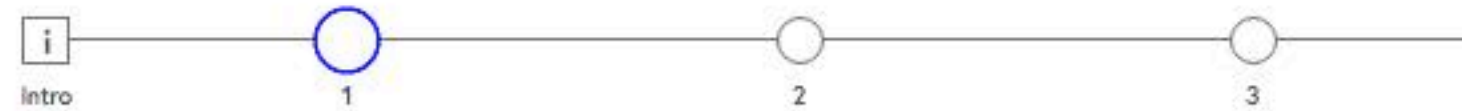
- Quizzes do not count towards your course score, they are just to help you learn
- You may take as many attempts as you wish to answer each question
- You can skip questions and come back to them later if you wish

[Begin quiz](#)[WHAT CAN GO WRONG?
VIDEO](#)[SKIP QUIZ
GO TO STEP 2.21](#)

2.20

4 MORE STEPS TO GO

Checking your progress

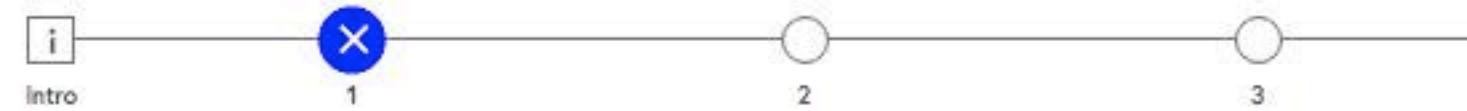


Question 1

Three processes **A**, **B** and **C** are running concurrently. **A** and **B** are linked, and **B** and **C** are linked. Suppose **A** receives an `exit(A,kill)` signal. Which of the following statements will be true in all circumstances?

- ☐ B will receive an exit signal with reason "kill".
- ☐ B will receive an exit signal with reason "killed".
- ☐ B will receive the message `{ 'EXIT', A, killed }`.
- ☐ C will receive the message `{ 'EXIT', B, killed }`.

Checking your progress



Question 1

Three processes **A**, **B** and **C** are running concurrently. **A** and **B** are linked, and **B** and **C** are linked. Suppose **A** receives an `exit(A, kill)` signal. Which of the following statements will be true in all circumstances?

- ☐ B will receive an exit signal with reason "kill".
- ☐ B will receive an exit signal with reason "killed".
- ☐ B will receive the message `{ 'EXIT', A, killed }`.
- ☒ C will receive the message `{ 'EXIT', B, killed }`.

Incorrect

Select another option



Simon Thompson LEAD EDUCATOR

This will only be the case if **C** is trapping exits, that is it has the flag `trap_exit` set to `true`.



Question 1

Three processes **A**, **B** and **C** are running concurrently. **A** and **B** are linked, and **B** and **C** are linked. Suppose **A** receives an `exit(A,kill)` signal. Which of the following statements will be true in all circumstances?

- ☐ B will receive an exit signal with reason "kill".
- ☒ B will receive an exit signal with reason "killed".
- ☐ B will receive the message `{ 'EXIT', A, killed }`.
- ☐ C will receive the message `{ 'EXIT', B, killed }`.

Correct



Simon Thompson LEAD EDUCATOR

Yes, B will receive this signal; if B is trapping exits then the signal will be converted into the message `{ 'EXIT', A, killed }`.

Question 2

Consider these two program fragments.

```
process_flag(trap_exit,true),  
Pid = spawn_link(M,F,A),  
  
process_flag(trap_exit,true),  
Pid = spawn(M,F,A),  
link(Pid),
```

You would expect them:

- ☐ to behave in the same way in all circumstances.
- ☐ to behave in the same way unless the process spawned terminates abnormally.
- ☐ to behave in the same way unless the process spawned terminates before the link command is executed.
- ☐ always to behave in different ways.



PREVIOUS QUESTION

SKIP QUESTION



Question 2

Consider these two program fragments.

```
process_flag(trap_exit,true),  
Pid = spawn_link(M,F,A),  
  
process_flag(trap_exit,true),  
Pid = spawn(M,F,A),  
link(Pid),
```

You would expect them:

- ☐ to behave in the same way in all circumstances.
- ☐ to behave in the same way unless the process spawned terminates abnormally.
- ☒ to behave in the same way unless the process spawned terminates before the link command is executed.
- ☐ always to behave in different ways.

Correct



Simon Thompson

LEAD EDUCATOR

That's right. The difference can only come from the link failing, because the `Pid` process has terminated before the `link(Pid)` can be executed.

Question 3

Which of these statements is false?

- ☐ If a process is trapping exits, then it can't be killed.
- ☐ A process killed with reason `kill` will send an exit message with reason `killed` to all processes linked to it.
- ☐ Processes are not linked by default.
- ☐ Process links are bi-directional.

[PREVIOUS QUESTION](#)[HOT CODE LOADING
VIDEO](#)

Categories

Courses grouped by subjects

Courses

Browse all individual online courses

Programs

Master a specific subject in depth

Degrees

Full postgraduate degrees

Using FutureLearn

Why it works
Proving your learning
Learning guide
Learner stories
Child safety

About FutureLearn

Our team
Our principles
Press

Learning for business

For healthcare

Partners

Become a partner

FAQ

Blog

Question 3

Which of these statements is false?

- ☒ If a process is trapping exits, then it can't be killed.
- ☐ A process killed with reason `kill` will send an exit message with reason `killed` to all processes linked to it.
- ☐ Processes are not linked by default.
- ☐ Process links are bi-directional.

Correct



Simon Thompson LEAD EDUCATOR

That's incorrect, yes! Sending an `exit` signal with reason `kill` will kill *any* process.



PREVIOUS QUESTION

HOT CODE LOADING
VIDEO

