Process Assignment – 3

Team Emertxe

WAP to create a child process which will execute command passed through command-line arguments.

Assignment - 3

Requirements

✓ Create child and execute a command passed from command-line arguments.

Assignment - 3

Requirements

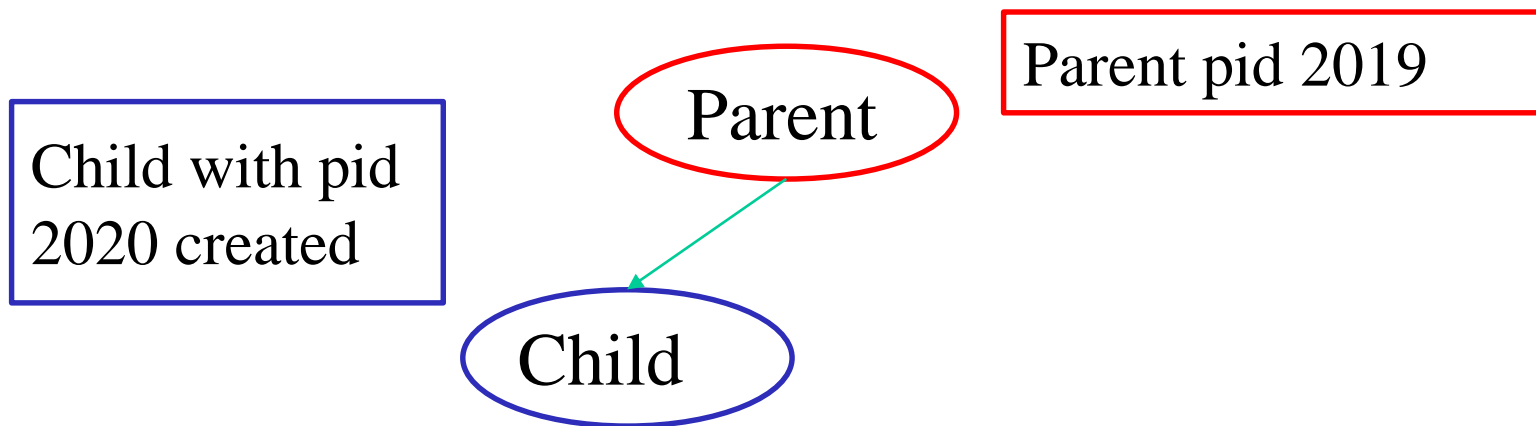✓ Create child and execute a command passed from command-line arguments.

Parent

Parent pid 2019

Assignment - 3

Requirements

✓ Create child and execute a command passed from command-line arguments.

Parent pid 2019

Parent

Child with pid 2020 created

Child

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Assignment - 3

Requirements

✓ Create child and execute a command passed from command-line arguments.

Parent

Parent pid 2019

Child with pid 2020 created

Child

exec

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Assignment - 3

Requirements

✓ Create child and execute a command passed from command-line arguments.

Parent

Parent pid 2019

Child with pid 2020 created

Child

./exec_child date

exec

Assignment - 3

Requirements

✓ Create child and execute a command passed from command-line arguments.
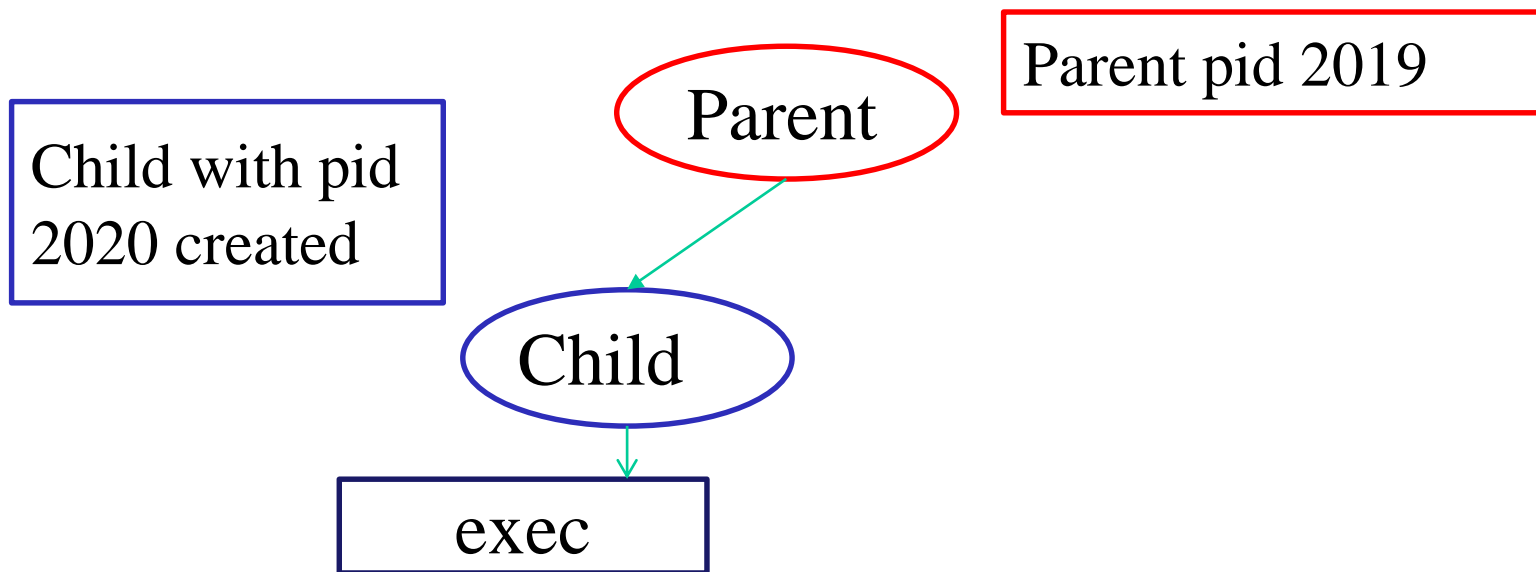
Parent

Parent pid 2019

Child with pid 2020 created
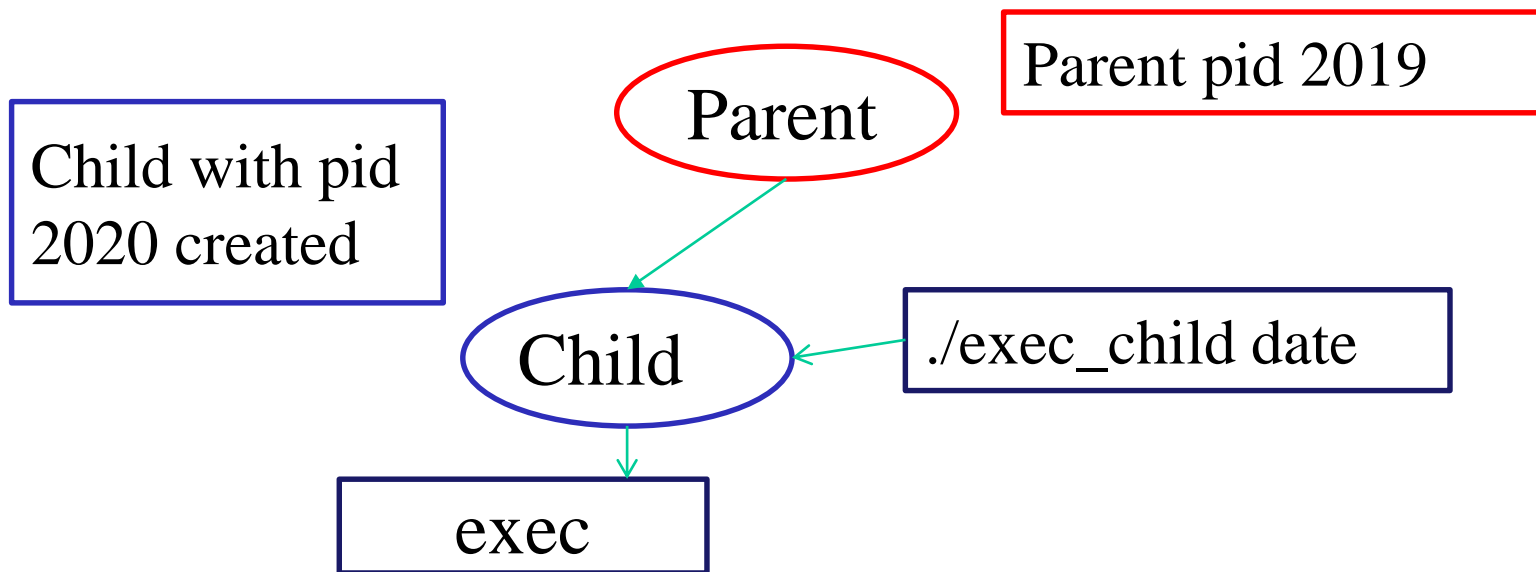
Child

./exec_child date

exec

Wed Apr 28 13:27:19 IST 2020

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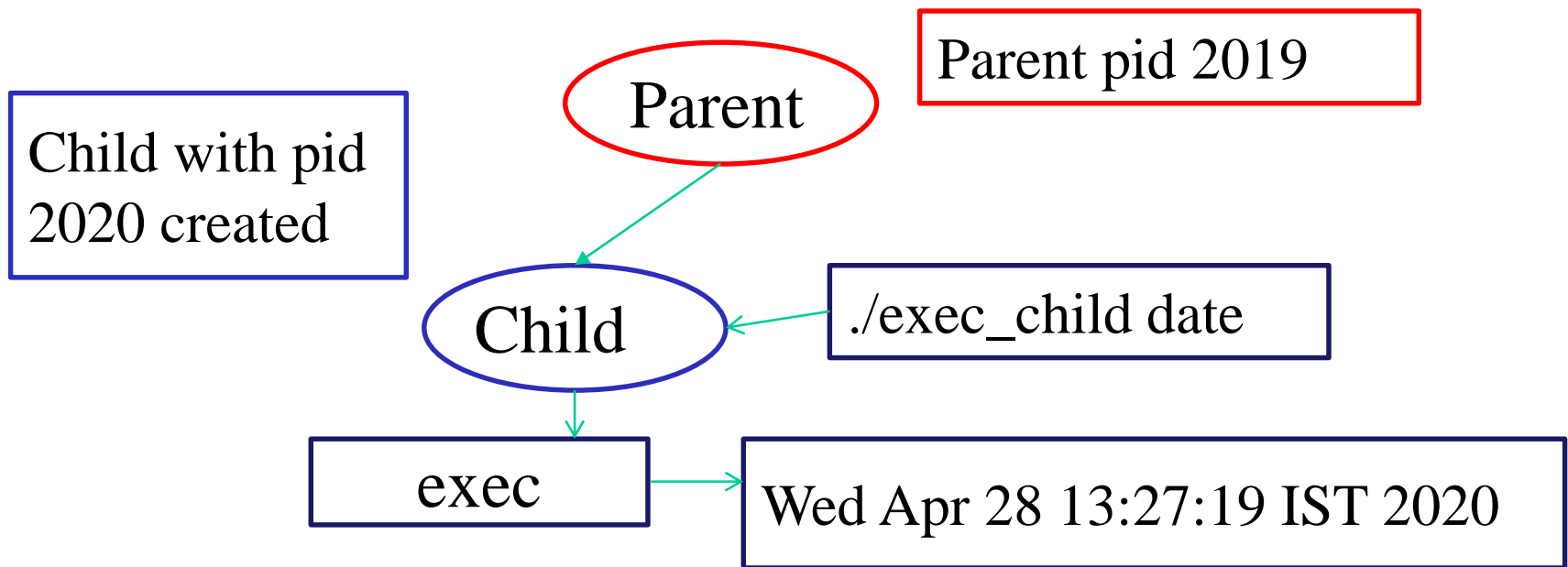
Assignment - 3

Requirements

- ✓ If no arguments passed print a usage message.

Assignment - 3

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- ✓ In case any wrong command passed, print an error message.

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Assignment - 3

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- ✓ If no arguments passed print a usage message.

- ✓ In case any wrong command passed, print an error message.

- ✓ After child terminates print the exit status of child process.

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Sample execution

1. No args passed (Print usage info)

   ./exec_child

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   ./exec_child

   Error : Please Pass the Command through CL.

   Usage : ./exec_child <command>

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Assignment - 3

Sample execution

1. No args passed (Print usage info)

    ./exec_child

    Error : Please Pass the Command through CL.

    Usage : ./exec_child <command>

2. Valid arg. passed

    ./exe_child date

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Assignment - 3

Sample execution

1. No args passed (Print usage info)

   ./exec_child

   Error : Please Pass the Command through CL.
   Usage : ./exec_child <command>
2. Valid arg. passed

   ./exe_child date

   This is the CHILD process, with id 11612

   Wed Apr 28 13:27:19 IST 2020

   Child exited with status 0

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Sample execution

3. Child terminated using SIGKILL (kill 9)

Assignment - 3

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./exe_child sleep 20 & (Running on background

[1] 2019

Assignment - 3

Sample execution

3. Child terminated using SIGKILL (kill 9)

   ./exe_child sleep 20 & (Running on background

   [1] 2019

   $ This is the CHILD process, with id 2020

Assignment - 3

Sample execution

3. Child terminated using SIGKILL (kill 9)

   ./exe_child sleep 20 & (Running on background

   [1] 2019

   $ This is the CHILD process, with id 2020
   $ kill -9 2020

Assignment - 3

Sample execution

3. Child terminated using SIGKILL (kill 9)

./exe_child sleep 20 & (Running on background

[1] 2019

$ This is the CHILD process, with id 2020

$ kill -9 2020

Child terminated abnormally

Child exited with code 9

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Assignment - 3

Pre-requisites

- ✓ Knowledge about system calls, How to read and understand 'man pages'.

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Assignment - 3

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- ✓ Good knowledge about processes.

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Assignment - 3

Pre-requisites

- ✓ Knowledge about system calls, How to read and understand 'man pages'.

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- ✓ Working of fork, wait and exec system calls.

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Assignment - 3

Pre-requisites

- ✓ Knowledge about system calls, How to read and understand 'man pages'.

- ✓ Good knowledge about processes.

- ✓ Working of fork, wait and exec system calls.

Objective

- ✓ To understand how to use exec system calls.

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