

Princeton University
COS 217: Introduction to Programming Systems
Trace of testfork

```
% gcc217 testfork.c -o testfork
```

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Trace of testfork

```
% ./testfork
```

```
29285
```

```
int main(void)
{
    printf("%d parent\n",
           (int)getPid());
    fflush(NULL);
    fork();
    printf("%d parent and child\n",
           (int)getPid());
    return 0;
}
```

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Writes:

```
29285 parent
```

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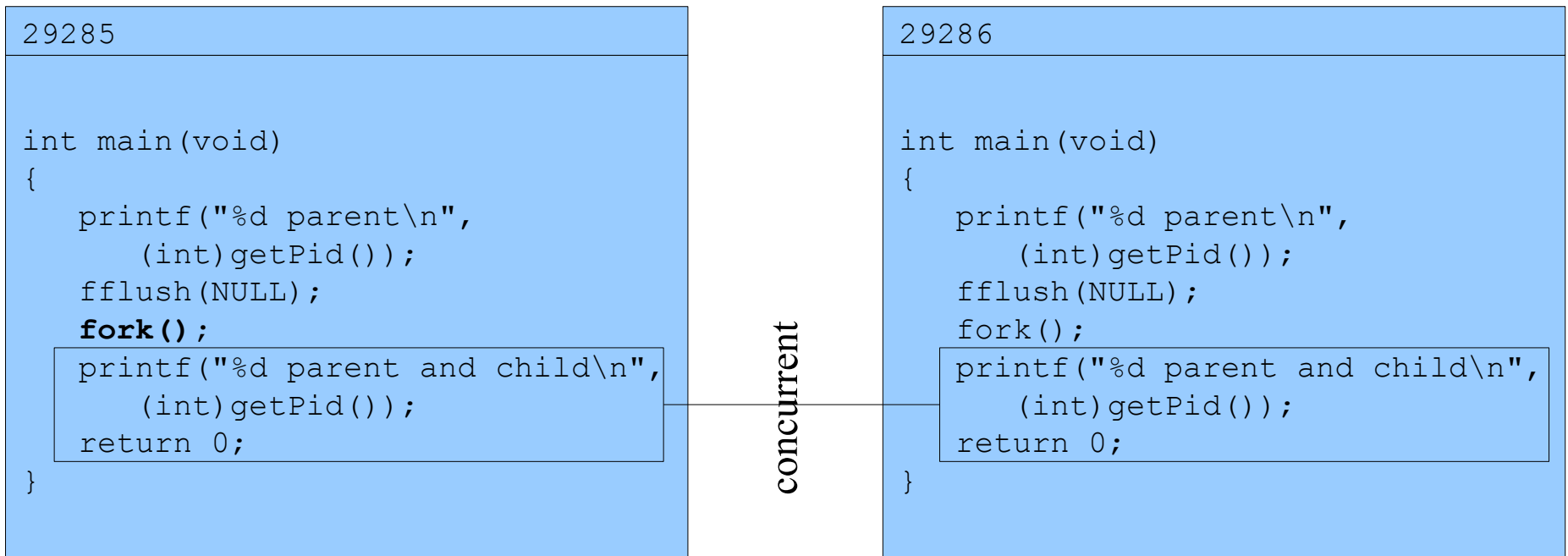
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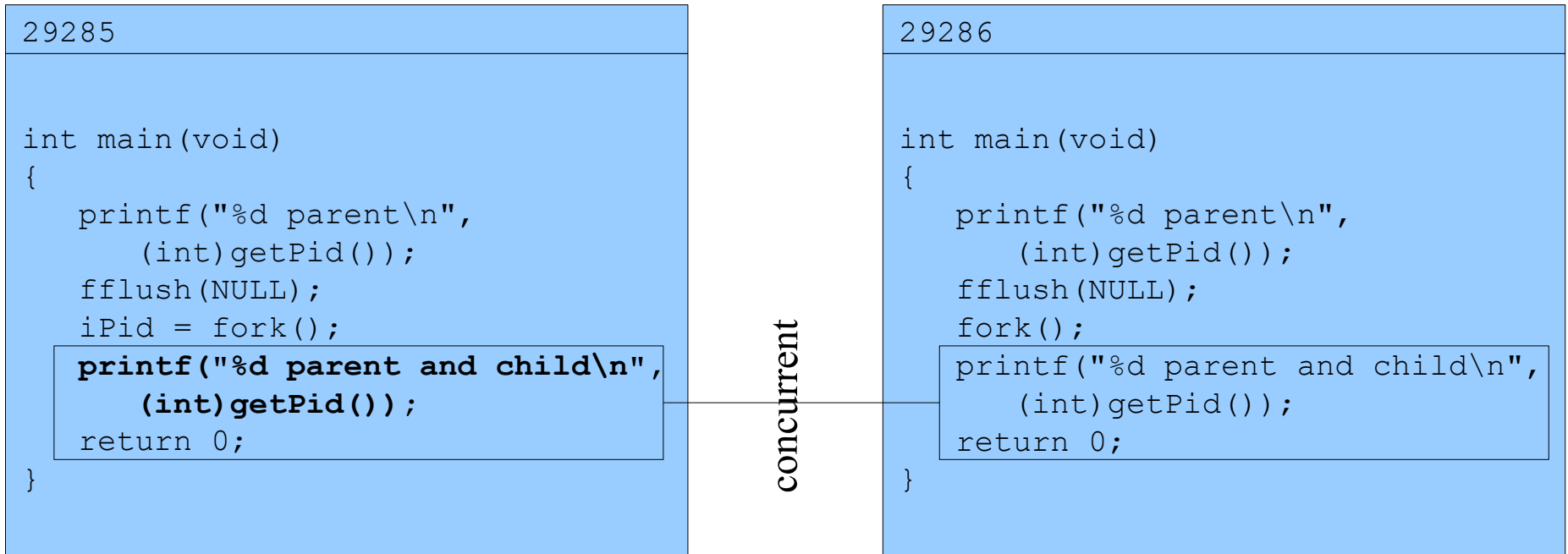
```
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Assume OS gives CPU to parent

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% ./testfork
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Writes:

```
29285 parent and child
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Assume OS gives CPU to parent

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    fflush(NULL);  
    fork();  
    printf("%d parent and child\n",  
          (int)getPid());  
    return 0;  
}
```

```
29286  
  
int main(void)  
{  
    printf("%d parent\n",  
          (int)getPid());  
    fflush(NULL);  
    fork();  
    printf("%d parent and child\n",  
          (int)getPid());  
    return 0;  
}
```

concurrent

Assume OS gives CPU to parent

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    fflush(NULL);
    fork();
    printf("%d parent and child\n",
          (int) getpid());
    return 0;
}
```

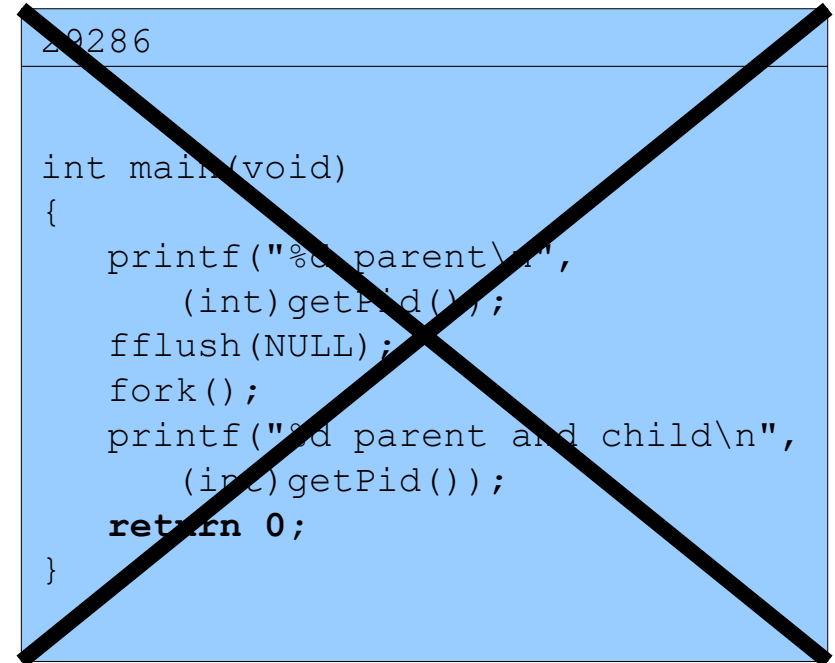
Writes:

```
29286 parent and child
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int main(void)  
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           (int)getPid());  
    fflush(NULL);  
    fork();  
    printf("%d parent and child\n",  
           (int)getPid());  
    return 0;  
}
```



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%

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