

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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           (int)getPid());
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```

Writes:

```
29285 parent
```

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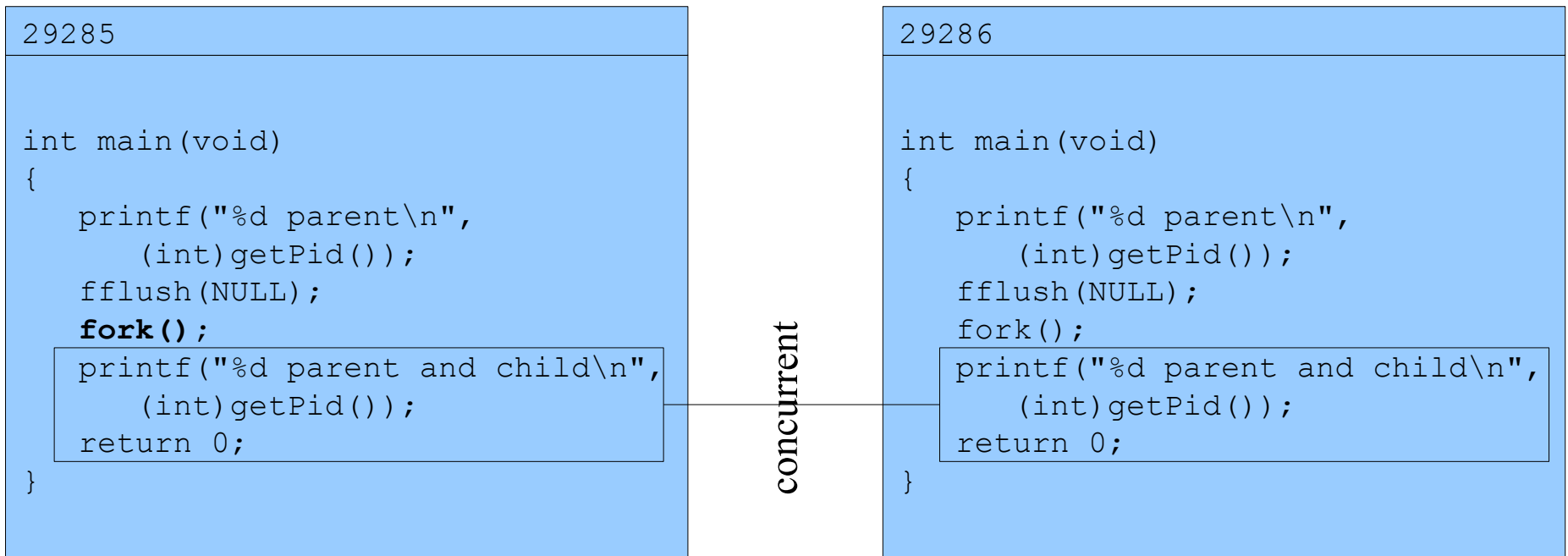
```
% ./testfork
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29285
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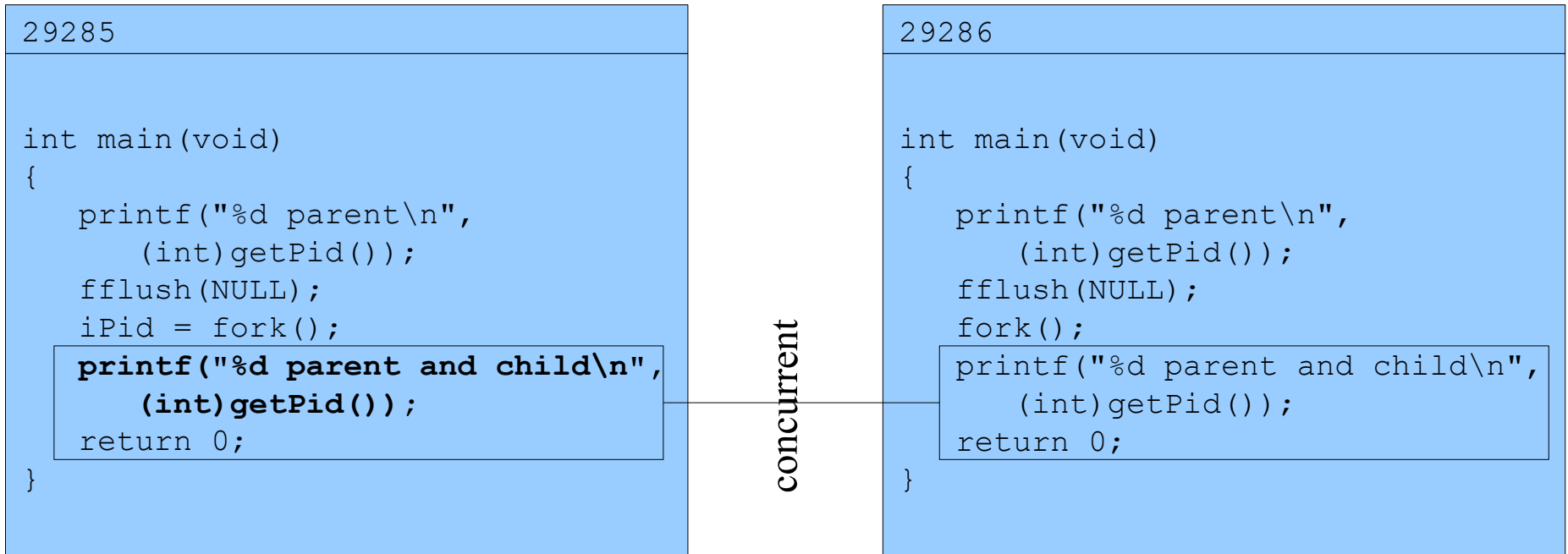
```
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Assume OS gives CPU to parent

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Trace of testfork

```
% ./testfork
```



Writes:

```
29285 parent and child
```

Assume OS gives CPU to parent

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

**Writes:**

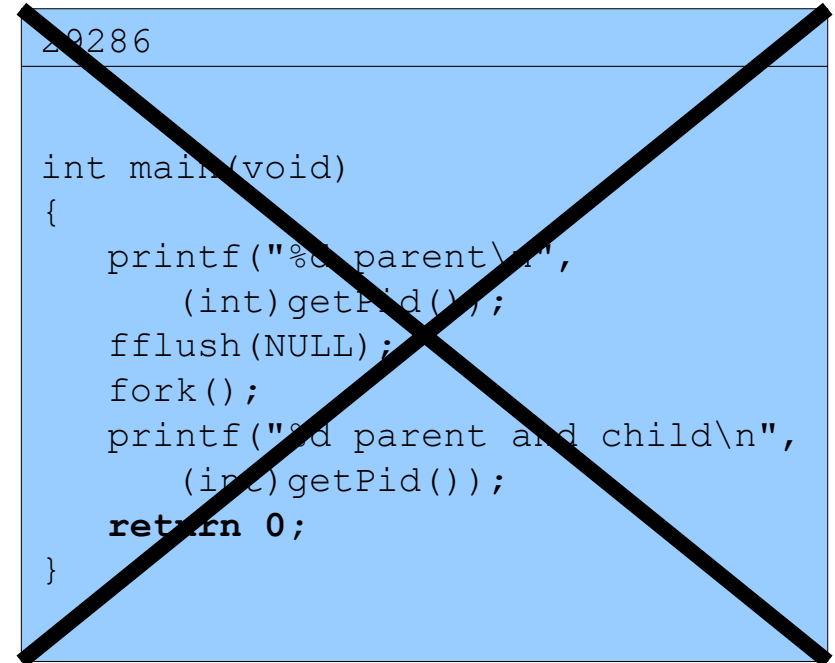
```
29286 parent and child
```



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```
% ./testfork
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20286  
  
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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