

Fundamentals of Computing: Lecture 8

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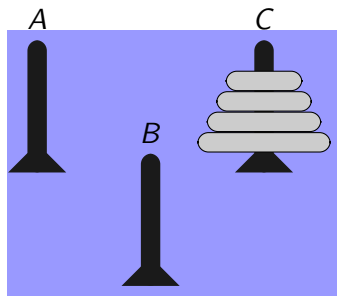
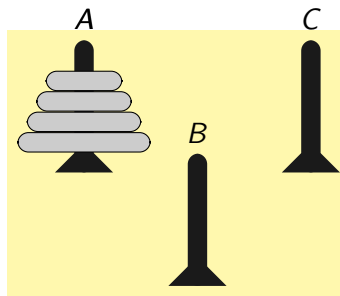
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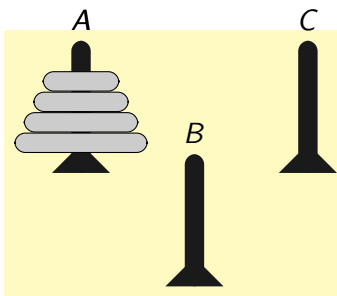
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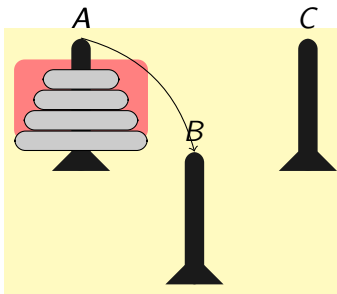
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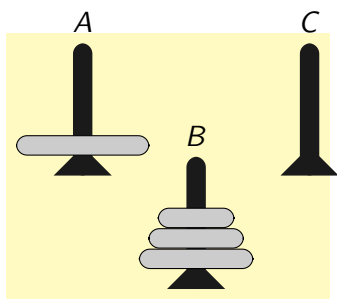
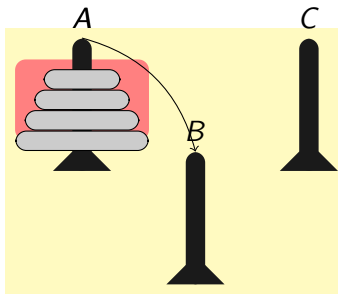
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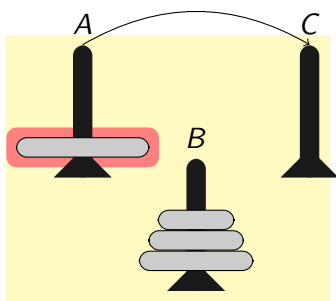
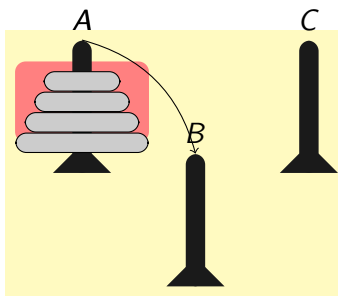
Recursion: Tower of Hanoi

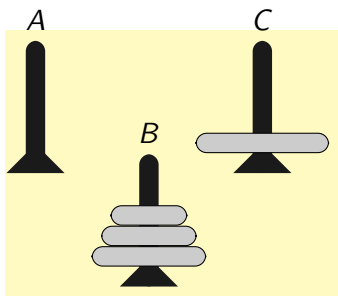
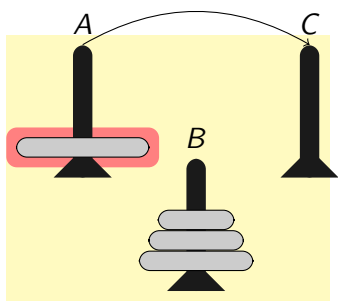
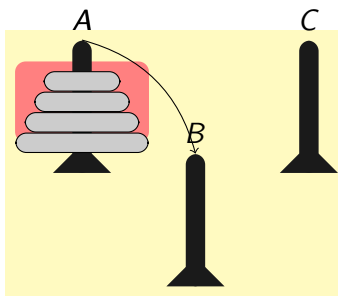


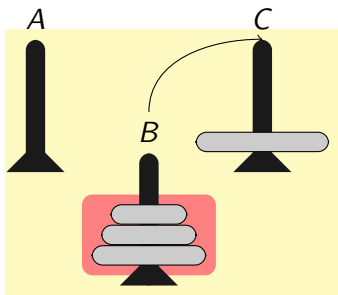
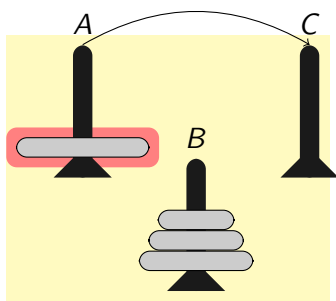
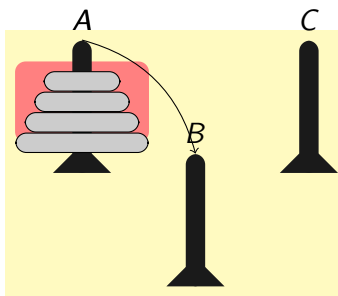


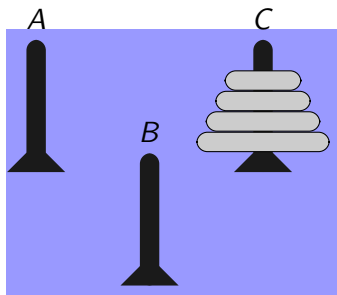
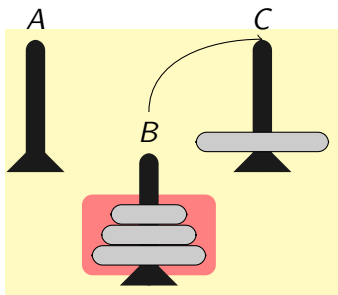
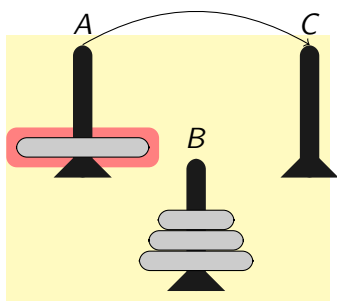
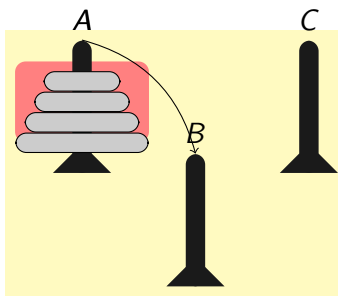












```
#include <stdio.h>
```

```
void hanoi(int, char, char, char);
```

```
int main()
```

```
{
```

```
    int n;
```

```
    printf("enter the number of disks: ");
```

```
    scanf("%d",&n);
```

```
    if( n < 0 ) return 1;
```

```
    hanoi(n, 'A', 'B', 'C');
```

```
    return 0;
```

```
}
```

```
void hanoi(int n, char a, char b, char c)
```

```
{
```

```
    if ( n <= 0 ) return;
```

```
    hanoi(n-1 , a, c, b);
```

```
    printf("( %d ) %c -> %c\n", n, a, c);
```

```
    hanoi( n-1, b, a, c);
```