

```
public static int power(int base, int exponent) {  
    if (exponent == 0) {  
        return 1;  
    }  
  
    if (exponent == 1) {  
        return base;  
    }  
  
    return base * power(base, exponent - 1);  
}
```

The diagram illustrates the recursive call stack for the `power` function. It features several colored circles (purple, pink, yellow, and orange) connected by lines, representing the sequence of function calls and returns. The nodes are arranged to show the flow of execution, with the base case (exponent == 0) at the top and the recursive call chain leading down to the final return statement.