

Problem -2: Given a double x and integer n, calculate x raised to power n.
Basically Implement pow(x, n).

```
def pow(x, n):
```

```
    if n == 0:
```

```
        return 1.0
```

```
    elif n < 0:
```

```
        x = 1 / x
```

```
        n = -n
```

```
    result = 1.0
```

```
    while n > 0:
```

```
        if n % 2 == 1:
```

```
            result *= x
```

```
        x *= x
```

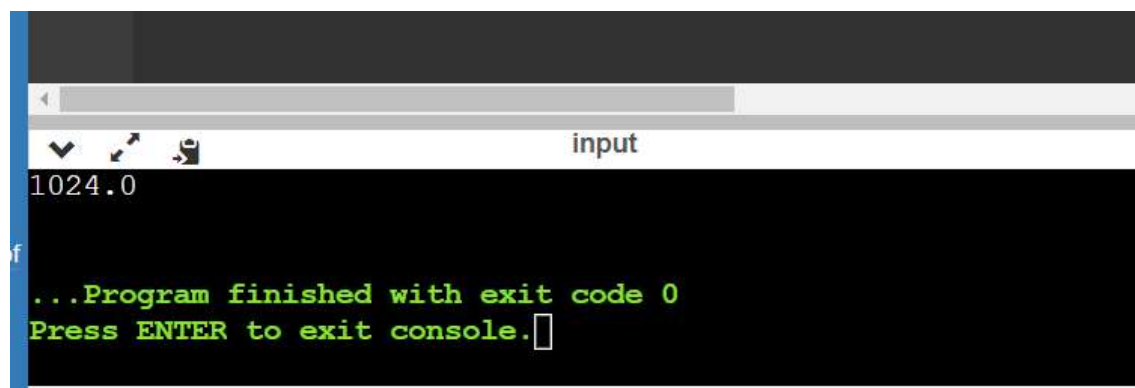
```
        n //= 2
```

```
    return result
```

```
x = 2.00000
```

```
n = 10
```

```
print(pow(x, n))
```



The screenshot shows a terminal window with a dark background. The title bar at the top is light gray and contains the word "input". The terminal output is as follows:

```
1024.0
...Program finished with exit code 0
Press ENTER to exit console.
```