

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int n;
```

```
    cin>>n;
```

```
    int s = 0;
```

```
    for(int i = 2;i<=n;i++){
```

```
        int c = 0;
```

```
        while(n % i == 0){
```

```
            n /= i;
```

```
            c++;
```

```
        }
```

```
        if(c >= 1){
```

```
            if(s){
```

```
                cout<<" * ";
```

```
            }
```

```
            s = 1;
```

```
            cout<<i<<"^"<<c;
```

```
        }
```

```
    }
```

```
    return 0;
```

```
}
```