```
def main():
 1
        while True:
 2
3
            au = input("AU: ")
 4
            try:
 5
                au = float(au)
 6
                break
            except ValueError:
7
 8
                continue
 9
10
        print(f"{au} AU is {convert(au)} m")
11
12
13
    def convert(au):
14
        return au * 149597870700
15
16
17
    if name == " main ":
18
        main()
```

```
from convert0 import convert

def test_conversion():
    assert convert(1) == 149597870700
    assert convert(50) == 7479893535000
```

```
def main():
 1
        while True:
 2
            au = input("AU: ")
 3
 4
            try:
                au = float(au)
                break
 6
 7
            except ValueError:
                continue
 8
 9
10
        print(f"{au} AU is {convert(au)} m")
11
12
13
    def convert(au):
        if not isinstance(au, (int, float)):
14
            raise TypeError("au must be an int or float")
15
        return au * 149597870700
16
17
18
19
    if name == " main ":
        main()
20
```

```
import pytest
from convert1 import convert

def test_conversion():
    assert convert(1) == 149597870700
    assert convert(50) == 7479893535000

def test_error():
    with pytest.raises(TypeError):
    convert("1")
```

```
import pytest
    from convert1 import convert
 3
 4
 5
    def test int conversion():
        assert convert(1) == 149597870700
 6
        assert convert(50) == 7479893535000
 7
 8
 9
10
    def test_error():
11
        with pytest.raises(TypeError):
            convert("1")
12
13
14
15
    def test_float_conversion():
        assert convert(0.001) == pytest.approx(149597870.691)
16
```

```
import pytest
    from convert1 import convert
 3
 4
 5
    def test int conversion():
        assert convert(1) == 149597870700
 6
        assert convert(50) == 7479893535000
 7
 8
 9
10
    def test error():
11
        with pytest.raises(TypeError):
            convert("1")
12
13
14
15
    def test_float_conversion():
        assert convert(0.001) == pytest.approx(149597870.691, abs=0.1)
16
```

```
import pytest
    from convert1 import convert
 3
 4
 5
    def test int conversion():
        assert convert(1) == 149597870700
 6
        assert convert(50) == 7479893535000
 7
 8
 9
10
    def test error():
11
        with pytest.raises(TypeError):
            convert("1")
12
13
14
15
    def test_float_conversion():
        assert convert(0.001) == pytest.approx(149597870.691, abs=1e-12)
16
```