```python
def convert_length(value, from_unit, to_unit):
    units = {
        'mm': 0.1,
        'cm': 1,
        'm': 100,
        'km': 100000
    }
    if from_unit in units and to_unit in units:
        result = (value * units[from_unit]) / units[to_unit]
        return result
    else:
        return None

def convert_weight(value, from_unit, to_unit):
    units = {
        'mg': 0.001,
        'g': 1,
        'kg': 1000
    }
    if from_unit in units and to_unit in units:
        result = (value * units[from_unit]) / units[to_unit]
        return result
    else:
        return None

def main():
    value = float(input("Enter value to convert: "))
    from_unit = input("Enter input unit: ").lower()
    to_unit = input("Enter output unit: ").lower()

    if from_unit == to_unit:
        print("Same units. No conversion needed.")
        return

    if from_unit in ['mm', 'cm', 'm', 'km'] and to_unit in ['mm', 'cm', 'm', 'km']:
        result = convert_length(value, from_unit, to_unit)
        if result is not None:
            print(f"Result: {result} {to_unit}")
        else:
            print("Invalid units.")

    elif from_unit in ['mg', 'g', 'kg'] and to_unit in ['mg', 'g', 'kg']:
        result = convert_weight(value, from_unit, to_unit)
        if result is not None:
            print(f"Result: {result} {to_unit}")
        else:
            print("Invalid units.")

    else:
        print("Units are not compatible for conversion.")

if __name__ == "__main__":
    main()
```