

---

## Stamps II

X68780\_en

---

We want to send a postcard by mail. We need to stamp worth  $n$  cents ( $n \geq 20$ ). Stamps have values 7 and 4 cents. As space is limited we want to know the minimum number of stamps we need to put on the postcard, without losing a cent.

Using the definition

```
struct Stamps {  
    int stamp7;  
    int stamp4;  
};
```

implement a *recursive* function

```
Stamps min_stamps(int n)
```

computing the mimimum number of necessary worth 7 stamps (*stamp7* field) and worth 4 stamps (*stamp4* field) for a total worth of  $n$  cents ( $n \geq 20$ ). For instance, for  $n = 58$ , the result fields of *min\_stamps* must be 6 and 4.

### Observation

In order to complete the recursive case, note that recursive calls will always provide a *Stamps* tuple with *stamp4* field at most 6.

### Observation

This problem is an example about using tuples in order to define functions computing a result that does not have a default representation as a single value.

### Observation

You only need to submit the required classes; your main program will be ignored. Strictly obey the type definitions of the statement.

### Problem information

Author: Jorge Castro

Generation: 2026-01-25T22:04:45.111Z

© Jutge.org, 2006–2026.

<https://jutge.org>