Lab Exercises

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Contents

1 Sample

Data: Some input data
Result: Same for output data
`/* this is a comment */`

```
1  initialization;
2  if this is true then
3  |  we do that, else nothing;
4  |  if we agree that then
5  |  |  we do that;
6  |  else
7  |  |  else we will do a more complicated if using else if;
8  |  |  if this first condition is true then
9  |  |  |  we do that;
10 |  |  else if this second condition is true then
11 |  |  |  this is done
12 |  |  else if this other condition is true then
13 |  |  |  this is done
14 |  |  end
15 |  |  else
16 |  |  |  in other case, we do this
17 |  |  end
18 |  end
19 end
```

Algorithm 1: Algorithm to Demonstrate Different Ifs

2 Question 4a

Data: A set C=$\{c_1, c_2 \ldots c_r\}$of denominations of coiins where $c_1 > c_2 > \ldots > c_r$ and a positive number n.
Result: A list of coins $d_1, d_2 \ldots d_k$ such that $\sum_{i=1}^{k}, d_i = n$ and k is minimized.

1 $C \leftarrow \emptyset$;
2 for $i \leftarrow 1$ to r do

Algorithm 2: makes change using smallest no. of coins