```
In[284]:= n = 100;

In[285]:= try[values_] := (confList = {};
        For[c = 1, c <= Length[config], c++,
          sum = {};
          For[v = 1, v ≤ Length[values], v++,
            s = config[[c]].values[[v]];
            If[! MemberQ[sum, s],
              AppendTo[sum, s], Goto[break]
            ]
          ];
          AppendTo[confList, config[[c]]];
          Label[break];
        ];
        Print["Valid conformations: ", Length[confList]])
      vi = {0, 1, 2};
      values = Flatten[Table[{vi[[i]], vi[[j]], vi[[k]], vi[[l]], vi[[m]]},
          {i, 3}, {j, 3}, {k, 3}, {l, 3}, {m, 3}], 4];
      Print["Cases of coins in 5 bags: ", Length[values]]
      config = Flatten[
        Table[{i, j, k, l, m}, {i, 1}, {j, 2 i, 10}, {k, 2 j, n}, {l, 2 k, n}, {m, 2 l, n}], 4];
      Print["Possible conformations for 5 bags: ", Length[config]]
      try[values]
      Print["First 10 conformations: \n", Grid@confList[[1 ;; 10]]]
      MemberQ[confList, {1, 3, 9, 27, 81}]

      Cases of coins in 5 bags: 243

      Possible conformations for 5 bags: 46 326

      Valid conformations: 196

      First 10 conformations:

      1  3  9  27  81
      1  3  9  27  82
      1  3  9  27  83
      1  3  9  27  84
      1  3  9  27  85
      1  3  9  27  86
      1  3  9  27  87
      1  3  9  27  88
      1  3  9  27  89
      1  3  9  27  90

      True

      vi = {0, 1, 4};
      values = Flatten[
        Table[{vi[[i]], vi[[j]], vi[[k]], vi[[l]]}, {i, 3}, {j, 3}, {k, 3}, {l, 3}], 3];
      Print["Cases of coins in 4 bag: ", Length[values]]
      config = Flatten[Table[{i, j, k, l}, {i, 1}, {j, 2 i, 10}, {k, 2 j, n}, {l, 2 k, n}], 3];
      Print["Possible conformations for 4 bags: ", Length[config]]
      try[values]
      Print["First 10 conformations: \n", Grid@confList[[1 ;; 10]]]
      MemberQ[confList, {1, 2, 10, 100}]
```

```
Cases of coins in 4 bag: 81

Possible conformations for 4 bags: 13 929

Valid conformations: 2066

First 10 conformations:

1  2  13  26
1  2  13  65
1  2  13  66
1  2  13  67
1  2  13  68
1  2  13  69
1  2  13  70
1  2  13  71
1  2  13  72
1  2  13  73

False
```

Some possible conformations are ommited when using current sampling method.

```
Grid@Table[{{1, 2, 13, 26}, ".", values[[i]],
   "=", values[[i]].{1, 2, 13, 26}}, {i, Length[values]}]
```

In[301]:=
```
vi = {0, 1, 4};
values = Flatten[Table[{vi[[i]], vi[[j]], vi[[k]], vi[[l]]},
    {i, 3}, {j, 3}, {k, 3}, {l, 3}, {m, 3}], 4];
Print["Cases of coins in 5 bag: ", Length[values]]
config =
   Flatten[Table[{i, j, k, l}, {i, 1}, {j, i, 10}, {k, j, n}, {l, k, n}, {m, l, n}], 4];
Print["Possible conformations for 5 bags: ", Length[config]]
try[values]
```

```
Cases of coins in 5 bag: 243

Possible conformations for 5 bags: 1 501 540

Valid conformations: 0
```

Using complete conformations still derives null answer.