In[646]:=

```
randomIntegers = RandomInteger[{4, 24}, 100];

    labels = RandomChoice[{0.8, 0.2} → {"m", "p"}, 100];
(* Choose labels with given probabilities *)

    (* Separate numbers based on labels *)
    mNumbers = Pick[randomIntegers, labels, "m"];
    pNumbers = Pick[randomIntegers, labels, "p"];

    (* Split each list into two sublists of approximately equal length *)
    {mList1, mList2} = TakeDrop[mNumbers, Ceiling[Length[mNumbers] / 2]];
    {pList1, pList2} = TakeDrop[pNumbers, Ceiling[Length[pNumbers] / 2]];

    (* Sort the lists: #1, #3 increasing and #2, #4 decreasing *)
    sortedMList1 = Sort[mList1];
    sortedMList2 = ReverseSort[mList2];
    sortedPList1 = Sort[pList1];
    sortedPList2 = ReverseSort[pList2];

    (* Prepend letters to each number *)
    labeledMList1 = StringJoin["m", IntegerString[#, 10, 2]] & /@ sortedMList1;
    labeledMList2 = StringJoin["m", IntegerString[#, 10, 2]] & /@ sortedMList2;
    labeledPList1 = StringJoin["p", IntegerString[#, 10, 2]] & /@ sortedPList1;
    labeledPList2 = StringJoin["p", IntegerString[#, 10, 2]] & /@ sortedPList2;

    (* Reverse order for labeledMList1 and labeledMList2 before concatenation *)
    reversedMList1 = Reverse[labeledMList1];
    reversedMList2 = Reverse[labeledMList2];

    (* Concatenate the lists in the order: reversedMList1,
labeledPList1, labeledPList2, reversedMList2 *)
    concatenatedList =
  Join[reversedMList1, labeledPList1, labeledPList2, reversedMList2];

    (* Prepare grid data for vertical display *)
    gridData = Transpose[Characters /@ concatenatedList];

    Grid[gridData, Spacings → {0, 0}]
(* Ensure each item is displayed vertically without spacing *)
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Out[664]=