

Pensieve header: Make the snip files in Snips/.

```
(Alt) In[ ]:= Exit[];

(Alt) In[ ]:= MakeSnips["GDOCompositions",
  DialogTags → {"RandomM", "LeftAssociation", "Associativity"}]
exporting Associativity with
{CellFilter → First, ExportBaseFilename → Snips/GDOCompositions/Associativity-In}
/.{PageWidth → 7.12, CellFilter → Identity, ExportBaseFilename → Automatic,
  ExportFormat → .pdf, ExportOptions → {ImageSize → Scaled[0.5]}, Split → True}...
exporting Associativity with
{CellFilter → Rest, ExportBaseFilename → Snips/GDOCompositions/Associativity-Out}
/.{PageWidth → 7.12, CellFilter → Identity, ExportBaseFilename → Automatic,
  ExportFormat → .pdf, ExportOptions → {ImageSize → Scaled[0.5]}, Split → True}...
exporting CompositionLaw with {ExportBaseFilename → Snips/GDOCompositions/CompositionLaw}
/.{PageWidth → 7.12, CellFilter → Identity, ExportBaseFilename → Automatic,
  ExportFormat → .pdf, ExportOptions → {ImageSize → Scaled[0.5]}, Split → True}...
exporting LeftAssociation with
{CellFilter → First, ExportBaseFilename → Snips/GDOCompositions/LeftAssociation-In}
/.{PageWidth → 7.12, CellFilter → Identity, ExportBaseFilename → Automatic,
  ExportFormat → .pdf, ExportOptions → {ImageSize → Scaled[0.5]}, Split → True}...
exporting LeftAssociation with
{CellFilter → Rest, ExportBaseFilename → Snips/GDOCompositions/LeftAssociation-Out}
/.{PageWidth → 7.12, CellFilter → Identity, ExportBaseFilename → Automatic,
  ExportFormat → .pdf, ExportOptions → {ImageSize → Scaled[0.5]}, Split → True}...
exporting RandomM with {CellFilter → First, ExportBaseFilename → Snips/GDOCompositions/RandomM-In}
/.{PageWidth → 7.12, CellFilter → Identity, ExportBaseFilename → Automatic,
  ExportFormat → .pdf, ExportOptions → {ImageSize → Scaled[0.5]}, Split → True}...
exporting RandomM with {CellFilter → Rest, ExportBaseFilename → Snips/GDOCompositions/RandomM-Out}
/.{PageWidth → 7.12, CellFilter → Identity, ExportBaseFilename → Automatic,
  ExportFormat → .pdf, ExportOptions → {ImageSize → Scaled[0.5]}, Split → True}...
(Alt) Out[ ]:= {Snips/GDOCompositions/RandomM-In.pdf, Snips/GDOCompositions/RandomM-Out.pdf,
  Snips/GDOCompositions/CompositionLaw.pdf, Snips/GDOCompositions/Associativity-In.pdf,
  Snips/GDOCompositions/Associativity-Out.pdf,
  Snips/GDOCompositions/LeftAssociation-In.pdf,
  Snips/GDOCompositions/LeftAssociation-Out.pdf}
```

## Prolog

```
SetDirectory["C:\\drorbn\\AcademicPensieve\\Projects\\DPG"];
SetOptions[$FrontEndSession, PrintingStyleEnvironment → "Working"];
```

“WinSort” from <https://mathematica.stackexchange.com/questions/10619/sort-strings-by-natural-ordering>:

```
(Alt) In[ ]:= WinSort[names_List] := names[[Ordering[Characters[names]]]];
```

## CellExport

(Following pensieve://Talks/Matemale-1804/CellExport.nb)

```
(Alt) In[ ]:= ConditionalExport[fname_String, rest___] := Module[{temp, exists},  
  temp = "ConditionalExportTemporary" <> "." <> FileExtension[fname];  
  exists = FileExistsQ[fname];  
  Export[temp, rest];  
  If[exists && FileByteCount[fname] === FileByteCount[temp],  
    DeleteFile[temp],  
    (* else *) (*Print["Exporting "<>fname<>"..."];*)  
    If[exists, DeleteFile[fname]];  
    RenameFile[temp, fname]  
  ];  
  fname  
];
```

(Alt) In[ ]:=

```

TagProperties[_] := {};
Options[CellExport] = {
  PageWidth → 6, CellFilter → Identity, ExportBaseFilename → Automatic,
  ExportFormat → ".pdf", ExportOptions → {}, Split → False};
CellExport[tag_String, opts__Rule] :=
  CellExport[NotebookGet[EvaluationNotebook[]], tag, opts];
CellExport[nb_Notebook, tag_String] := CellExport[nb, tag, TagProperties[tag]];
CellExport[nb_Notebook, tag_String, opts__Rule] := Module[
  {cells, p, cell, pwunit = 108,
   filename = ExportBaseFilename /. {opts} /. Options[CellExport] /. Automatic → tag,
   format = ExportFormat /. {opts} /. Options[CellExport],
   filter = CellFilter /. {opts} /. Options[CellExport],
   split = Split /. {opts} /. Options[CellExport],
   pagewidth = PageWidth /. {opts} /. Options[CellExport],
   exportoptions = ExportOptions /. {opts} /. Options[CellExport]
  },
  Print["exporting ", tag, " with ", {opts}, "/.", Options[CellExport], "..."];
  cells = {Table[nb[[Sequence@@p[[1 ;; -2]]],
    {p, Position[nb, CellTags → tag]}
  ] // filter} // Flatten;
  If[split,
    If[Length[cells] ≥ 1,
      If[Length[cells] == 1,
        cells = Append[First[cells], PageWidth → pwunit pagewidth],
        cells = Cell[CellGroup[cells], PageWidth → pwunit pagewidth]
      ];
      ConditionalExport[filename <> format, cells, ImageResolution → 300, exportoptions]
    ],
    k = 0;
    Table[
      ++k;
      ConditionalExport[
        filename <> "-" <> ToString[k] <> format,
        Append[cell, PageWidth → pwunit pagewidth],
        ImageResolution → 300, exportoptions],
      {cell, cells}
    ]
  ]
];

```

# Snips

(Alt) In[ ]:=

```

MakeSnips[nb_, opts___Rule] := (
{
  dt = DialogTags /. {opts} /. DialogTags → {},
  force = Force /. {opts} /. Force → False
};
If[FileType["Snips/" <> nb] === None, CreateDirectory["Snips/" <> nb]];
If[force ∨ FileType["Snips/" <> nb <> "/Verification.txt"] === None ∨
  AbsoluteTime@FileDate["Snips/" <> nb <> "/Verification.txt"] <
  AbsoluteTime@FileDate[nb <> ".nb"],
If[Head[$FrontEnd] === FrontEndObject,
  SetOptions[CellExport, ExportFormat → ".pdf", Split → True,
    PageWidth → 7.12, ExportOptions → {ImageSize → Scaled[0.5]}],
  SetOptions[CellExport, ExportFormat → ".pdf", Split → True, PageWidth → 7.12]
];
SourceNotebook = NotebookGet@NotebookOpen[Directory[] <> "/" <> nb <> ".nb"];
tags = Cases[SourceNotebook, (CellTags → tag_) :=> tag, Infinity] // Union;
files = Reap[Flatten[Table[
  Which[
    tag == "817",
    { (* this is only left here as a demo for how to make an exception *)
      Sow@CellExport[SourceNotebook, "817", CellFilter → First,
        ExportBaseFilename → "Snips/" <> nb <> "/817-In"],
      Sow@CellExport[SourceNotebook, "817", CellFilter → Rest,
        ExportBaseFilename → "Snips/" <> nb <> "/817-Out",
        PageWidth → 5.5 * 0.24 / 0.16]
    },
    MemberQ[dt, tag], {
      Sow@CellExport[SourceNotebook, tag, CellFilter → First,
        ExportBaseFilename → "Snips/" <> nb <> "/" <> tag <> "-In"],
      Sow@CellExport[SourceNotebook, tag, CellFilter → Rest,
        ExportBaseFilename → "Snips/" <> nb <> "/" <> tag <> "-Out"]
    },
    True, Sow@CellExport[SourceNotebook,
      tag, ExportBaseFilename → "Snips/" <> nb <> "/" <> tag]
  ],
{tag, tags}]]];
PutAppend[DateString[], "Snips/" <> nb <> "/Verification.txt"];
files = Flatten[files];
(*DeleteFile /@ Complement[
  StringReplace["\\"->"/"]/@FileNames["Snips/"<>nb<>"/*.pdf"], files];*)
WinSort@Union[files],
(*Else*)
WinSort@FileNames["Snips/" <> nb <> "/*.pdf"]
]
)

```