[analysis]_average_percent_improvement

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```
[39]: import torch
      import random

      import sys
      sys.path.append("../../../lib")
      import utility
```

```
[40]: res_perc_impr = torch.load("../../data/gpt-j/percent_improvement_1000_examples.
       ↪pt")
```

```
[41]: num_layers = res_perc_impr[0][1][2]
      avg_PI = utility.average_sites(res_perc_impr, num_layers)
```

```
[42]: x = num_layers
      y = ["first subject token", "middle subject tokens", "last subject token", \
                "first subsequent token", "further tokens", "last token"]
      bound = max(torch.max(avg_PI).item(), abs(torch.min(avg_PI).item()))
      incr = bound / 10000
      title = "average percent improvement: (p*_h - p*) / |p - p*|"
      color_schema = "PuOr"

      utility.plot_results(avg_PI, x, y, -bound, bound, incr, title, color_schema)
```