SaC lab 01

1 Task 1

Make sure you have the SaC compiler available. If you use the lab machines you may add the following to your `.bashrc`:

```
export PATH=$PATH:/home/hv15/students/bin
```

Alternatively, you can download a binary distribution from

`http://www.sac-home.org/index.php?p=.%2F55_Download%2F21_SaC_1.0_Releases`

Unpack the archive and follow the instructions in the README. Please note, that this is a package using an older build-system that requires some slightly different setup which is explained in the README. Note as well, that multi-threaded execution (Task 3) in that version is achieved by using a flag `-mt` instead of `-t mt_pth`.

2 Task 2

Get the SaC tutorial from

`http://www.sac-home.org/publications/tutorial.pdf`

Attempt the following excercises:

1. Write a hello world program, compile and run it.
2. Excercise 1. Make sure you compile with `-check tc` as this introduces a higher level of runtime checks.
3. Excercise 4
4. Excercise 5
5. Excercise 9
6. Excercise 15

3 Task 3

Implement the approximation of π discussed in the lecture. Compile it using `-t mt_pth` as additional option. Run the executable with a commandline argument `-mt n` where n is a number between 1 and 10. Compare the programm's behaviour with that of your openMP experiments.

Hand-out: 18/02/2016