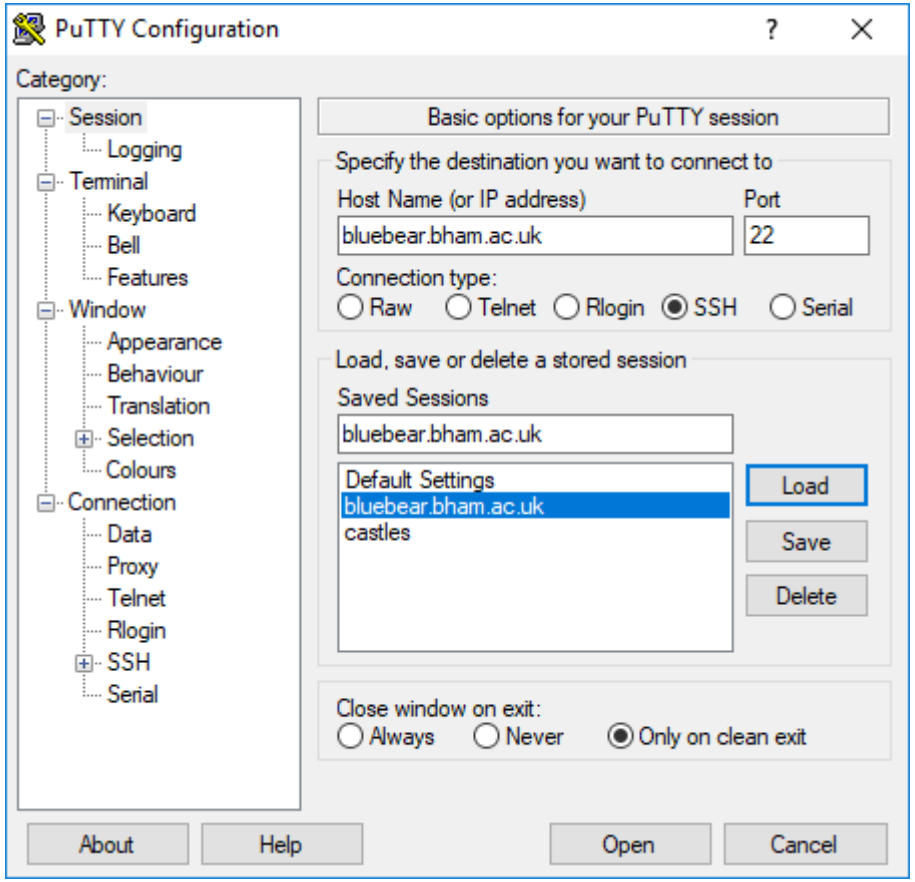
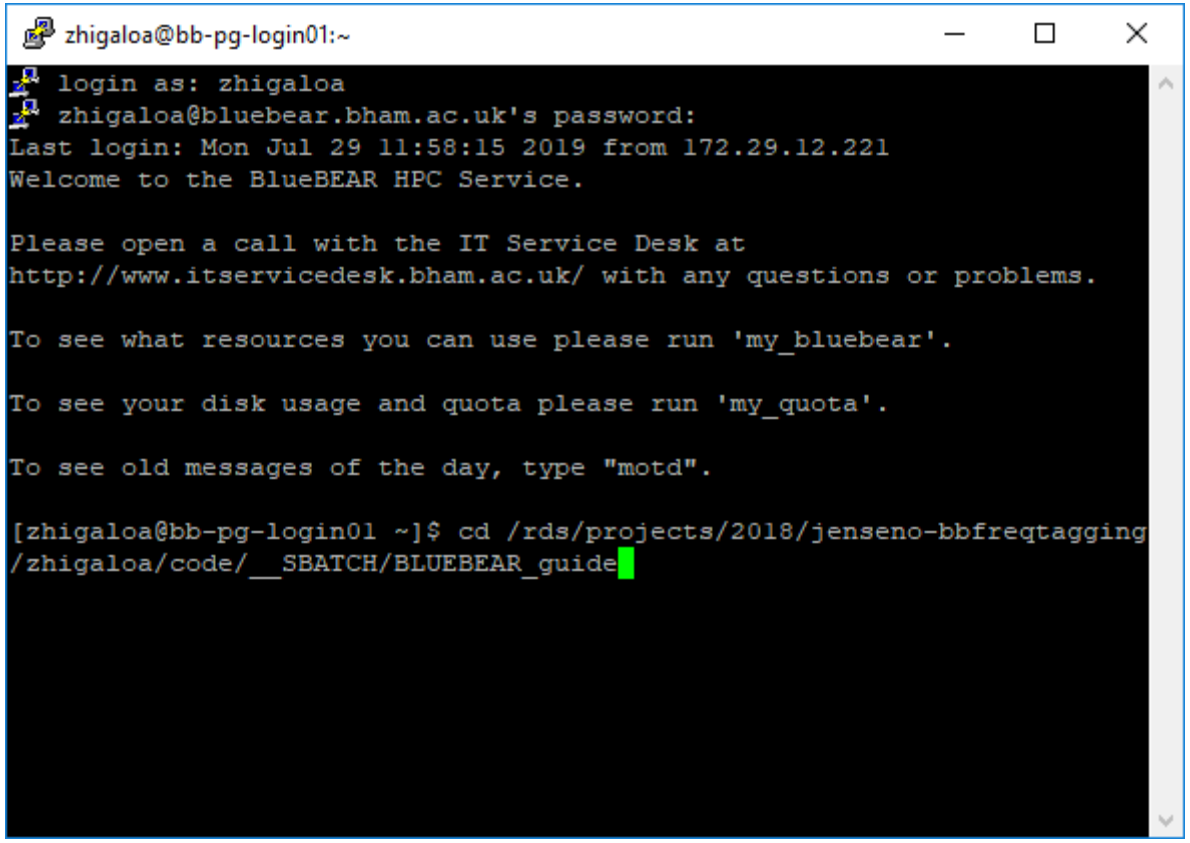
Step 1: Open PUTTY and login to bluebear.bham.ac.uk



Step 2: Select folder with the scripts using “cd” command



Step 3: In “SB_RUN.sh” (1) set subject indices: tSubjects=(1 2 5); (2) set name of your MATLAB script: f=“my_script.m”, (3) set computation time: t=“12:00:00” and (4) memory: m=“16GB”.

In this example, subjects with indices 1, 2 and 5 are selected; script name is “my_script”; time is 12 hours; memory is 16 GB.

d:\code__SBATCH\BLUEBEAR_guide_2\SB_RUN.sh - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

SB_RUN.sh

```
#!/bin/bash

# set parameters
declare -a tSubjects=(1 2 5) # subject index
f="my_script" # your MATLAB function name
t="12:00:00"  # time
m="16GB"      # memory

# do not change code below this line
fname="$f.sbatch"
echo "#!/bin/bash" > $fname
echo "#SBATCH --ntasks 1" >> $fname
echo "#SBATCH --time $t" >> $fname
echo "#SBATCH --qos bbdefault" >> $fname
echo "#SBATCH --mem $m" >> $fname
echo "" >> $fname
echo "set -e" >> $fname
echo "" >> $fname
echo "module purge; module load bluebear" >> $fname
echo "module load MATLAB/2018b" >> $fname
echo "" >> $fname
echo "i=\$1" >> $fname
echo "i=\"\${i:1:\${#i}}\"" >> $fname
echo "" >> $fname
echo "matlab -nodisplay -r \"$f(\$i)\"" >> $fname
```

d:\code__SBATCH\BLUEBEAR_guide_2\my_script.m - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

my_script.m

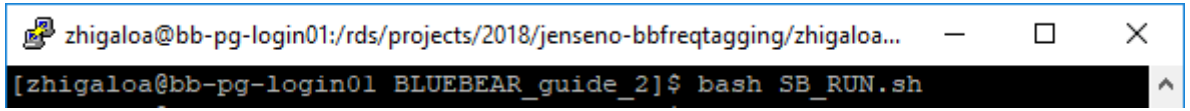
```
%--------------------------------------------------------------------------
% Function
%--------------------------------------------------------------------------
function my_script(i)

tSubjects = {'KF15', 'ZW01', 'EE78', 'KJ14', 'WQ20', 'DF10'};
             1       2                       5
fprintf(1, 'Processing ... %s\n', tSubjects{i});

end % end

%--------------------------------------------------------------------------
```

Step 4: Use command “bash SB_RUN.sh” to launch script for all subjects.



Step 5: After some time (when resources on Bluebear become available) two output files (per subject) will be created in the script folder: *.out and *.stats.

In this example, “slurm-6188956.out” contains MATLAB script output and “slurm-6188956.stats” some extra info.

Lister - [z:\zhigaloa\code__SBATCH\BLUEBEAR_guide\slurm-6188956.out]

File Edit Options Encoding Help

```
Java/1.8.0_152
MATLAB/2018b
Opening log file:  /rds/homes/z/zhigaloa/java.log.36176

                            < M A T L A B (R) >
                  Copyright 1984-2018 The MathWorks, Inc.
                   R2018b (9.5.0.944444) 64-bit (glnxa64)
                              August 28, 2018


To get started, type doc.
For product information, visit www.mathworks.com.

Processing ... KF15
```

Lister - [z:\zhigaloa\code__SBATCH\BLUEBEAR_guide\slurm-6188956.stats]

File Edit Options Encoding Help 100 %

```
+------------------------------------------------------------------------------+
| Job on the BlueBEAR cluster:
| Starting at Thu Aug  1 09:47:04 2019 for zhigaloa(607737)
| Identity jobid 6188956 jobname SB_RUN.sh
| Running against project chious-meg-posture and in partition cascadelake-shared
| Requested cpu=1,mem=16GB,node=1,billing=1 - 12:00:00 walltime
| Assigned to nodes bear-pg0211u07b
| Command /rds/projects/2018/jenseno-bbfreqtagging/zhigaloa/code/__SBATCH/BLUEBEA
R_guide/SB_RUN.sh
| WorkDir /rds/projects/2018/jenseno-bbfreqtagging/zhigaloa/code/__SBATCH/BLUEBEA
R_guide
+------------------------------------------------------------------------------+
+------------------------------------------------------------------------------+
| Finished at Thu Aug  1 09:47:27 2019 for zhigaloa(607737) on the BlueBEAR
Cluster
| Required () - 00:00:23 walltime
| JobState COMPLETING - Reason None
| Exitcode 0:0
+------------------------------------------------------------------------------+
```