COMP 2710: Project 2
auDiskTool - A Tool for Monitoring Disk Devices

What's new? The command of display report has been changed:
    print report – open and display the report file

Sample Usage

1. Help
```
$./audisktool_xzq0001
auDiskTool, version 1.0.0. Type 'help' to find more about commands.

>help
run - run the monitoring tool.
set interval [value] – set sampling period to [value]
set count [value] – set the number of records to [value]
set report [name] – set report file name to [name]
set blk_read    [0|1] – set print_blk_read to 0 or 1
set blk_read/s  [0|1] – set print_blk_read/s to 0 or 1
set kb_read/s   [0|1] – set print_kb_read/s to 0 or 1
set blk_write   [0|1] – set print_blk_write to 0 or 1
set blk_write/s [0|1] – set print_blk_write/s to 0 or 1
set kb_write    [0|1] – set print_kb_write to 0 or 1
print conf – display all the parameters
print report – open and display the report file
save – the configuration file audisktool.conf is updated
display – exit – exit the tool.

>
```

2. Run the tool
```
$./audisktool_xzq0001
auDiskTool, version 1.0.0. Type 'help' to find more about commands.

>run
Monitoring time = 5 Seconds, Number of records = 10,
print_blk_read = 1, print_blk_read/s = 1, print_kb_read/s = 1,
print_blk_write = 0, print_blk_write/s = 0, print_kb_write/s = 0,
report file name = 'report.adt'
Please wait ...

A file "report.adt" is updated.

>
```

3. Change report file name
```
$./audisktool_xzq0001
auDiskTool, version 1.0.0. Type 'help' to find more about commands.

>set report xzq0001.adt
The report file name is changed from 'report.adt' to 'xzq0001.adt'.
You can now type 'run' to generate new records to be saved in
```

```
        'xzq0001.adt'.
        Note: 'report.adt' will not be deleted by audisktool.

        >
```

4. Display records in the report file
4.1 no record is found
```
        $./audisktool_xzq0001
        auDiskTool, version 1.0.0. Type 'help' to find more about commands.

        >print report
        No record found in 'report.adt'

        >
```

4.2 Records are found
```
        $./audisktool_xzq0001
        auDiskTool, version 1.0.0. Type 'help' to find more about commands.

        >print report
        2 records found in 'report.adt'
        blk_read blk_read/s kb_read/s blk_write blk_write/s kb_write/s
        10      1.13       2.26      N/A       N/A         N/A
        55      5.4        10.8      N/A       N/A         N/A

        >
```

5. Change count and interval
```
        $./audisktool_xzq0001
        auDiskTool, version 1.0.0. Type 'help' to find more about commands.

        >set count 15
        The number of records generated in each run has been changed to 15.

        >set interval 3
        The sampling interval has been changed to 3 seconds.

        >
```

6. Change print_blk_read and other similar parameters
```
        $./audisktool_xzq0001
        auDiskTool, version 1.0.0. Type 'help' to find more about commands.

        >set blk_read 0
        Print_blk_read has been changed to 0.

        >set blk_write 0
        Print_blk_write was 0; the parameter remains unchanged to 0.

        >
```

7. Display all the parameters.
```
        $./audisktool_xzq0001
        auDiskTool, version 1.0.0. Type 'help' to find more about commands.
```

```
>print conf
Monitoring time = 5 Seconds, Number of records = 10,
print_blk_read = 1, print_blk_read/s = 1, print_kb_read/s = 1,
print_blk_write = 0, print_blk_write/s = 0, print_kb_write/s = 0,
report file name = 'report.adt'

>
```

8. Save the configuration file

8.1 no need to save

```
$./audisktool_xzq0001
auDiskTool, version 1.0.0. Type 'help' to find more about commands.

>save
Audisktool.conf has not been updated. There is no need to save the
file.
```

8.2 change can save the configuration file

```
$./audisktool_xzq0001
auDiskTool, version 1.0.0. Type 'help' to find more about commands.

>set blk_read 0
Print_blk_read has been changed to 0.

>save
file audisktool.conf has been updated.

>
```