

Program

```
while true;do
    echo "Menu"
    echo "1.No of Process forked since the last boot"
    echo "2.no of process currently in the subsystem"
    echo "3.No of running process"
    echo "4.No of blocked process"
    echo "5.PID of the current shell"
    echo "6.No of context switches performed by the shell"
    echo "7 Exit"
    read -p "Enter a choice:" choice
    case $choice in
        1)echo "processesforkedsincelastboot:"$(awk '{print $2}' '/proc/stat')
        ;;
        2)echo "Process currently in system:"$(ps -e --no-headers | wc -l)
        ;;
        3)echo "Running processes:"$(ps -r --no-headers | wc -l)
        ;;
        4)echo "Blocked Process:"$(ps -eo stat | grep -c 'D')
        ;;
        5)echo "PID of current shell:"$$
        ;;
        6)voluntary=$(ps -o nvcs w --pid $$)
        nonvoluntary=$(ps -o nivcs w --pid $$)
        echo "Contextswitches by this shell"
        echo "Voluntary $voluntary"
        echo "Non Voluntary $nonvoluntary"
        ;;
        7)echo "Exiting....."
        exit 1
        ;;
        *)echo "Invalid input"
    esac
done
```

Sample run of the program

```
s23a40@Server-2:~/blab$ chmod +x exp9.sh
s23a40@Server-2:~/blab$ ./exp9.sh
Menu
1.No of Process forked since the last boot
2.no of process currently in the subsystem
3.No of running process
4.No of blocked process
5.PID of the current shell
6.No of context switches performed by the shell
7 Exit
Enter a choice:1
processes forked since last boot:72168
Menu
1.No of Process forked since the last boot
2.no of process currently in the subsystem
3.No of running process
4.No of blocked process
5.PID of the current shell
6.No of context switches performed by the shell
7 Exit
Enter a choice:2
Process currently in system:1677
Menu
1.No of Process forked since the last boot
2.no of process currently in the subsystem
3.No of running process
4.No of blocked process
5.PID of the current shell
6.No of context switches performed by the shell
7 Exit
Enter a choice:3
Running processes:1
Menu
1.No of Process forked since the last boot
2.no of process currently in the subsystem
3.No of running process
4.No of blocked process
5.PID of the current shell
6.No of context switches performed by the shell
7 Exit
Enter a choice:5
PID of current shell:72135
```