Program

```
get_processor_info(){
  case $1 in
    1)
      #Vendor(Manufacturer)ID
      grep -m 1 "vendor_id" /proc/cpuinfo | awk '{print $3}'
      ;;
    2)
      #Model Name
      grep -m 1 "model name" /proc/cpuinfo | awk '{print $4}'
      ;;
    3)
      #Processor Generation
      grep -m 1 "cpu family" /proc/cpuinfo | awk '{print $4}'
      ;;
    4)
      #Number of processor chips
      grep "physical id" /proc/cpuinfo | sort -u | wc -l
      ;;
    5)
      # Number of processor cores
      grep -m 1 "cpu cores" /proc/cpuinfo | awk '{print $4}'
      ;;
    6)
      #Is processor hyperthreaded?
      threads_per_core=$(grep -m 1 "siblings" /proc/cpuinfo | awk '{print $4}')
      cores_per_socket=$(grep -m 1 "cpu cores" /proc/cpuinfo | awk '{print $4}')
      if(("$threads_per_core" -gt"$cores_per_socket"));then
        echo "Yes"
      else
        echo "No"
      fi
      ;;
    7)
      #Number of logical processors
      grep -c "processor" /proc/cpuinfo
      ;;
    8)
      #Core ID of each logical processor
      grep "processor\|core id" /proc/cpuinfo | awk '/processor/{p=$NF}/core id/{print "Logi
      ;;
    9)
      #Speed of each logical processor
      grep "processor\|cpu MHz" /proc/cpuinfo|awk '/processor/{p=$NF}/cpu MHz/{print"Logical
      ;;
```

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    10)
       #Cache Size
       grep -m 1 "cache size" /proc/cpuinfo | awk '{print $4}'
       ;;
    *)
      echo "Invalid option. Please try again."
      ;;
  esac
}
#Menu driven interface
while true;do
  echo "_________________"
  echo "Processor information menu"
  echo "_________________"
  echo "1.Vendor(Manufacturer)ID"
  echo "2.Model Name"
  echo "3.Processor Generation"
  echo "4.Number of processor chips"
  echo "5.Number of processor cores"
  echo "6.Is your processor hyperthreaded?"
  echo "7.Number of logical processors"
  echo "8.Core ID of each logical processor"
  echo "9.Speed of each logical processor"
  echo "10.Cache size"
  echo "11.Exit"
  echo "_________________"
  read -p "Enter your choice[1-11]:" choice
  if(($choice==11));then
    echo "Exiting....Goodbye!"
    break
  fi
  get_processor_info $choice
  echo ""
done
```

Sample run of the program

```
s23a40@Server-2:~/blab$ bash ex2.sh

____________________
Processor information menu

____________________
1.Vendor(Manufacturer)ID
2.Model Name
3.Processor Generation
4.Number of processor chips
5.Number of processor cores
6.Is your processor hyperthreaded?
7.Number of logical processors
8.Core ID of each logical processor
9.Speed of each logical processor
10.Cache size
11.Exit

____________________
Enter your choice[1-11]:1
GenuineIntel


____________________
Processor information menu

____________________
1.Vendor(Manufacturer)ID
2.Model Name
3.Processor Generation
4.Number of processor chips
5.Number of processor cores
6.Is your processor hyperthreaded?
7.Number of logical processors
8.Core ID of each logical processor
9.Speed of each logical processor
10.Cache size
11.Exit

____________________
Enter your choice[1-11]:2
Intel(R)
```