Shell Script Assignment

Write a shell script to change the values in a file(i.e sig.conf) according to the input passed to the script. The script should ask for all four inputs from the user & also validate the input.
Below are the details of input. In full bracket options are given, you have to restrict the user pass single value for each input from the provided options in the full bracket.
Input:-
1) Component Name [INGESTOR/JOINER/WRANGLER/VALIDATOR]
2) Scale [MID/HIGH/LOW]
3) View [Auction/Bid]
4) Count [single digit number]
Explanation of a conf file line.
<view> ; <scale> ; <component name> ; ETL ; vdopia-etl= <count>
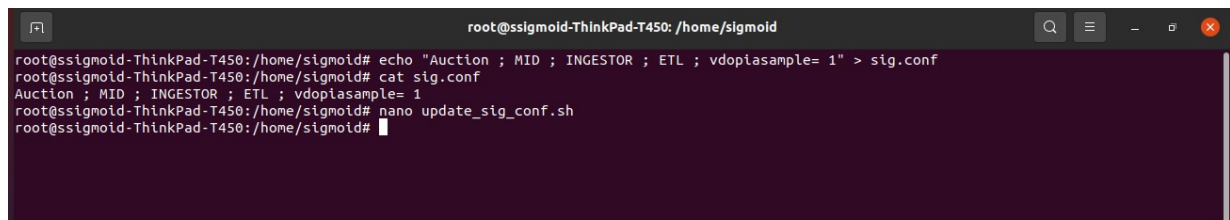Note:- vdopiasample stands for Auction & vdopiasample-bid is for Bid
The script should change the values in the file according to the input provided. At a time only one line of the conf file should be altered.

Create the `sig.conf` File
echo "Auction ; MID ; INGESTOR ; ETL ; vdopiasample= 1" > sig.conf

Create the `update_sig_conf.sh` File

update_sig_conf.sh

```bash
#!/bin/bash

# Function to validate component name
validate_component() {
    case "$1" in
        INGESTOR|JOINER|WRANGLER|VALIDATOR) return 0 ;;
        *) echo "Invalid Component Name. Must be one of
[INGESTOR, JOINER, WRANGLER, VALIDATOR]." ; return 1 ;;
    esac
}

# Function to validate scale
validate_scale() {
```

```bash
    case "$1" in
        MID|HIGH|LOW) return 0 ;;
        *) echo "Invalid Scale. Must be one of [MID, HIGH,
LOW]." ; return 1 ;;
    esac
}

# Function to validate view
validate_view() {
    case "$1" in
        Auction|Bid) return 0 ;;
        *) echo "Invalid View. Must be one of [Auction,
Bid]." ; return 1 ;;
    esac
}

# Function to validate count
validate_count() {
    if [[ "$1" =~ ^[0-9]$ ]]; then
        return 0
    else
        echo "Invalid Count. Must be a single digit number
(0-9)."
        return 1
    fi
}

# Read and validate inputs
read -p "Enter Component Name
[INGESTOR/JOINER/WRANGLER/VALIDATOR]: " component
while ! validate_component "$component"; do
    read -p "Please enter a valid Component Name
[INGESTOR/JOINER/WRANGLER/VALIDATOR]: " component
done

read -p "Enter Scale [MID/HIGH/LOW]: " scale
while ! validate_scale "$scale"; do
    read -p "Please enter a valid Scale [MID/HIGH/LOW]: "
scale
done

read -p "Enter View [Auction/Bid]: " view
while ! validate_view "$view"; do
    read -p "Please enter a valid View [Auction/Bid]: " view
done

read -p "Enter Count [single digit number]: " count
while ! validate_count "$count"; do
```

```bash
    read -p "Please enter a valid Count [single digit
number]: " count
done

if [[ "$view" == "Auction" ]]; then
    vdopiasample="vdopiasample"
else
    vdopiasample="vdopiasample-bid"
fi

new_line="$view ; $scale ; $component ; ETL ; $vdopiasample=
$count"

conf_file="sig.conf"
if [ -f "$conf_file" ]; then
    # Use sed to replace the first matching line
    sed -i "0,/;/{s|.*|$new_line|;b}" "$conf_file"
    echo "Configuration updated successfully."
else
    echo "Error: $conf_file not found."
fi
```
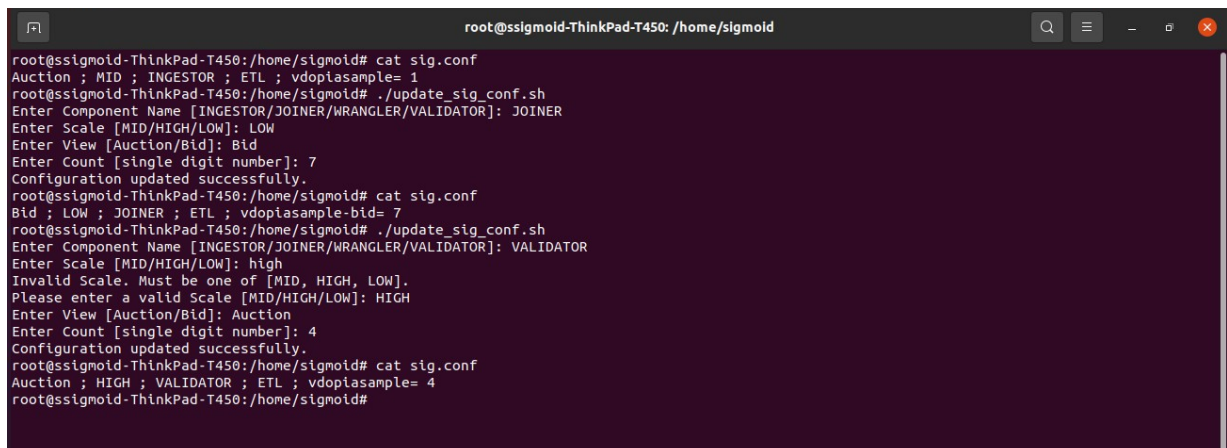
Run the Script: