. Write a shell script to perform following operations on student database.  
 a) Insert b) Delete c)Update d)Search

**#!/bin/bash**

**# File to store student records**

**DB\_FILE="students.txt"**

**# Function to display menu**

**show\_menu() {**

**echo "Choose an operation:"**

**echo "1) Insert"**

**echo "2) Delete"**

**echo "3) Update"**

**echo "4) Search"**

**echo "5) Exit"**

**}**

**# Function to insert a new student record**

**insert\_student() {**

**read -p "Enter Student ID: " id**

**read -p "Enter Student Name: " name**

**read -p "Enter Student Age: " age**

**read -p "Enter Student Grade: " grade**

**echo "$id|$name|$age|$grade" >> $DB\_FILE**

**echo "Student record inserted successfully."**

**}**

**# Function to delete a student record by ID**

**delete\_student() {**

**read -p "Enter Student ID to delete: " id**

**grep -v "^$id|" $DB\_FILE > temp.txt && mv temp.txt $DB\_FILE**

**echo "Student record deleted if ID was found."**

**}**

**# Function to update a student record by ID**

**update\_student() {**

**read -p "Enter Student ID to update: " id**

**if grep -q "^$id|" $DB\_FILE; then**

**grep -v "^$id|" $DB\_FILE > temp.txt**

**mv temp.txt $DB\_FILE**

**read -p "Enter new Name: " name**

**read -p "Enter new Age: " age**

**read -p "Enter new Grade: " grade**

**echo "$id|$name|$age|$grade" >> $DB\_FILE**

**echo "Student record updated successfully."**

**else**

**echo "Student ID not found."**

**fi**

**}**

**# Function to search for a student record by ID**

**search\_student() {**

**read -p "Enter Student ID to search: " id**

**grep "^$id|" $DB\_FILE && echo "Record found." || echo "Record not found."**

**}**

**# Main script loop**

**while true; do**

**show\_menu**

**read -p "Enter your choice: " choice**

**case $choice in**

**1) insert\_student ;;**

**2) delete\_student ;;**

**3) update\_student ;;**

**4) search\_student ;;**

**5) exit 0 ;;**

**\*) echo "Invalid choice, please try again." ;;**

**esac**

**done**