26. Write a program to check Opcode error in a given job and raise an interrupt.

**#!/bin/bash**

**# List of valid opcodes (example list)**

**VALID\_OPCODES=("MOV" "ADD" "SUB" "MUL" "DIV" "INT" "JMP" "CMP" "CALL" "RET")**

**# Input ALP file**

**read -p "Enter the ALP input file name: " input\_file**

**# Check if the input ALP file exists**

**if [ ! -f "$input\_file" ]; then**

**echo "Input file does not exist."**

**exit 1**

**fi**

**# Function to check opcode validity**

**check\_opcode() {**

**local opcode=$1**

**for valid\_opcode in "${VALID\_OPCODES[@]}"; do**

**if [[ "$opcode" == "$valid\_opcode" ]]; then**

**return 0 # Opcode is valid**

**fi**

**done**

**return 1 # Opcode is invalid**

**}**

**# Reading the input file line by line to check for opcode errors**

**echo "Checking for opcode errors..."**

**line\_number=1**

**error\_found=false**

**while IFS= read -r line; do**

**# Extract the first word (opcode) from the line**

**opcode=$(echo "$line" | awk '{print $1}')**

**# Check if the extracted opcode is valid**

**if ! check\_opcode "$opcode"; then**

**echo "Error: Invalid opcode '$opcode' found on line $line\_number."**

**error\_found=true**

**# Simulate raising an interrupt by printing a message**

**echo "Interrupt raised due to opcode error."**

**break**

**fi**

**((line\_number++))**

**done < "$input\_file"**

**if [ "$error\_found" = false ]; then**

**echo "No opcode errors found. Job is valid."**

**fi**