QUESTION 5 ANSWERS

```
coder@dce7ae72477b:~$ mkdir dirA dirB
coder@dce7ae72477b:~$ echo "Hello world" > dirA/file1.txt
coder@dce7ae72477b:~$ echo "This is A" > dirA/file2.txt
coder@dce7ae72477b:~$ echo "Only in A" > dirA/fileA.txt
coder@dce7ae72477b:~$ echo "Hello world" > dirB/file1.txt
coder@dce7ae72477b:~$ echo "This is B" > dirA/file3.txt
coder@dce7ae72477b:~$ echo "Only in B" > dirA/fileB.txt
coder@dce7ae72477b:~$ vi sync.sh
coder@dce7ae72477b:~$ chmod +x sync.sh
coder@dce7ae72477b:~$ ./sync.sh dirA dirB
Files only in dirA:
file2.txt
file3.txt
fileA.txt
fileB.txt

Files only in dirB:

Files with same name in both directories:
file1.txt : SAME
```

```
coder@dce7ae72477b:~$ mv dirA/file3.txt  dirB
coder@dce7ae72477b:~$ mv dirA/fileB.txt  dirB
coder@dce7ae72477b:~$ ./sync.sh dirA dirB
Files only in dirA:
file2.txt
fileA.txt

Files only in dirB:
file3.txt
fileB.txt

Files with same name in both directories:
file1.txt : SAME
coder@dce7ae72477b:~$
```

```bash
#!/bin/bash
if [ $# -ne 2 ]; then
        echo "Usage: $0 <dirA> <dirB>"
        exit 1
fi
dirA=$1
dirB=$2
if [ ! -d "$dirA" ] || [ ! -d "$dirB" ]; then
        echo "Error: One or both directories do not exist."
        exit 1
fi
echo "Files only in $dirA:"
comm -23 <(ls "$dirA" | sort) <(ls "$dirB"| sort)
echo ""
echo "Files only in $dirB:"
comm -13 <(ls "$dirA" | sort) <(ls "$dirB"| sort)
echo ""
echo "Files with same name in both directories:"
for file in $(ls "$dirA"); do
        if [ -f "$dirB/$file" ]; then
                if cmp -s "$dirA/$file" "$dirB/$file"; then
                        echo "$file : SAME"
                else
                        echo "$file : DIFFERENT"
                fi
        fi
done
~
"sync.sh" 27L, 605C                                    27,4            All
```

I created a shell script to compare two directories without modifying their contents. The script lists files present only in `dirA` or only in `dirB` using directory comparison techniques. For files with the same name in both directories, it checks whether their contents match using `diff` or `cmp`.