Question 1 to 6 : code


```
cdac@GAURAV:~/OsAssignment$ ls
f1.sh  f10.sh  f11.sh  f11.shy  f2.sh  f3.sh  f4.sh  f5.sh  f6.sh  f7.sh  f8.sh  f9.sh
cdac@GAURAV:~/OsAssignment$ cat f1.sh
#!/bin/bash
echo "hello,world!"
cdac@GAURAV:~/OsAssignment$ cat f2.sh
name="CDAC Mumbai"
echo "$name"

cdac@GAURAV:~/OsAssignment$ cat f3.sh
#!/bin/bash
echo "enter a number"
read num
echo "$num"

cdac@GAURAV:~/OsAssignment$ cat f4.sh
#!/bin/bash
num1=5
num2=3
result=`expr $num1 + $num2`
echo $result
cdac@GAURAV:~/OsAssignment$ cat f5.sh
#!/bin/bash
echo "entre a num 1"
read num1

if  (( num1% 2 == 0 ))
then
        echo  "result  is even"
else
        echo  "result is  odd"
fi
cdac@GAURAV:~/OsAssignment$ cat f6.sh
#!/bin/bash
a=0
for a in 1 2 3 4 5
do
echo $a
done

cdac@GAURAV:~/OsAssignment$
```

Its output:


```
cdac@GAURAV:~/OsAssignment$ ls
f1.sh  f10.sh  f11.sh  f11.shy  f2.sh  f3.sh  f4.sh  f5.sh  f6.sh  f7.sh  f8.sh  f9.sh
cdac@GAURAV:~/OsAssignment$ bash f1.sh
hello,world!
cdac@GAURAV:~/OsAssignment$ bash f2.sh
CDAC Mumbai
cdac@GAURAV:~/OsAssignment$ bash f3.sh
enter a number
5
5
cdac@GAURAV:~/OsAssignment$ bash f4.sh
8
cdac@GAURAV:~/OsAssignment$ bash f5.sh
entre a num 1
5
result is  odd
cdac@GAURAV:~/OsAssignment$ bash f6.sh
1
2
3
4
5
cdac@GAURAV:~/OsAssignment$
```

Question 7 to 10 code :

```
cdac@GAURAV:~/OsAssignment$ cat f7.sh
#!/bin/bash
a=1
while [ $a -le 5 ]
do
echo $a
a=` expr $a + 1 `
done
cdac@GAURAV:~/OsAssignment$ cat f8.sh
#!/bin/bash

if test  -f "file.txt"
then
echo "File exists"
else
echo "File does not exits"
fi
cdac@GAURAV:~/OsAssignment$ cat f9.sh
echo "number"
read num
if [ $num -gt 10 ]
then
echo "number is greater"
else
echo "lower number than 10"
fi

cdac@GAURAV:~/OsAssignment$ cat f10.sh
#!/bin/bash

echo -n "      "
for j in {1..10}; do
    printf "%4d" $j
done
echo

for i in {1..5}; do
    # Print row label
    printf "%2d " $i

    for j in {1..10}; do
        printf "%4d" $((i * j))
    done
    echo
done

cdac@GAURAV:~/OsAssignment$
```

Output :

```
cdac@GAURAV:~/OsAssignment$ bash f7.sh
1
2
3
4
5
cdac@GAURAV:~/OsAssignment$ bash f6.sh
1
2
3
4
5
cdac@GAURAV:~/OsAssignment$ bash f9.sh
number
4
lower number than 10
cdac@GAURAV:~/OsAssignment$ bash f10.sh
         1   2   3   4   5   6   7   8   9  10
 1   1   2   3   4   5   6   7   8   9  10
 2   2   4   6   8  10  12  14  16  18  20
 3   3   6   9  12  15  18  21  24  27  30
 4   4   8  12  16  20  24  28  32  36  40
 5   5  10  15  20  25  30  35  40  45  50
cdac@GAURAV:~/OsAssignment$
```

Question 11 code and output :

```
cdac@GAURAV:~/OsAssignment$ cat f11.sh
#!/bin/bash

while true
do
    echo "Enter a number:"
    read num

    if [ $num -lt 0 ]; then
        break
    fi

    result=$((num * num))
    echo "The square of $num is $result"
done

cdac@GAURAV:~/OsAssignment$ bash f11.sh
Enter a number:
12
The square of 12 is 144
Enter a number:
```