OS ASSIGNMENT 2

2 – Batch Programs

Questions :-

1. Create a menu and display it. The user will select one of the menu

option depending on the option selected a DOS command should be executed.

Menu should contain the following:

a. List all files

b. Create directory

c. Display today's date and time

d. Make abc.txt file as read-only

e. Exit from menu

Code :-

```
@echo off
@REM labeling
echo.
color a
:menu
echo ********** Menu **********
echo 1. List All Files
echo 2. Create Directory
echo 3. Display Today's Date And Time
echo 4. Make abc.txt file as read-only
echo 5. Exit from menu
echo.

set /p ch=Enter your choice:%=%

if %ch%==1 goto label-1
if %ch%==2 goto label-2
if %ch%==3 goto label-3
if %ch%==4 goto label-4
if %ch%==5 goto label-5


:label-1
echo.
dir /p
echo.
goto menu
```

```
:label-2
echo.
md new-dir
dir /ad
echo.
goto menu

:label-3
echo.
echo Date
 date /t
echo Time
time /t
echo.
goto menu

:label-4
echo.
notepad abc.txt
attrib +r .\abc.txt
echo .
echo **** Showing File Types ****
attrib
echo.
goto menu

:label-5
cls
```

Output :-

```
D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\1>batch1.bat

********** Menu **********
1. List All Files
2. Create Directory
3. Display Today's Date And Time
4. Make abc.txt file as read-only
5. Exit from menu

Enter your choice:1

 Volume in drive D is User
 Volume Serial Number is 36B2-C823

 Directory of D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\1

17-02-2022  13:14    <DIR>          .
24-02-2022  03:11    <DIR>          ..
17-02-2022  12:46                47 abc.txt
17-02-2022  12:44               755 batch1.bat
17-02-2022  13:52             4,403 kaliman logo.bat
               3 File(s)          5,205 bytes
               2 Dir(s)  33,189,298,176 bytes free

********** Menu **********
1. List All Files
2. Create Directory
3. Display Today's Date And Time
4. Make abc.txt file as read-only
5. Exit from menu

Enter your choice:2

 Volume in drive D is User
 Volume Serial Number is 36B2-C823

 Directory of D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\1

24-02-2022  03:47    <DIR>          .
24-02-2022  03:11    <DIR>          ..
24-02-2022  03:47    <DIR>          new-dir
               0 File(s)             0 bytes
               3 Dir(s)  33,189,298,176 bytes free
```

```
********** Menu **********
1. List All Files
2. Create Directory
3. Display Today's Date And Time
4. Make abc.txt file as read-only
5. Exit from menu

Enter your choice:3

Date
24-02-2022
Time
03:47

********** Menu **********
1. List All Files
2. Create Directory
3. Display Today's Date And Time
4. Make abc.txt file as read-only
5. Exit from menu

Enter your choice:4

.
**** Showing File Types ****
A    R          D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\1\abc.txt
A               D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\1\batch1.bat
A               D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\1\kaliman logo.bat
```

2. Execute a C language program from the batch code.

Code :-

BATCH2.BAT

```
@echo off
pushd
call %1
if not exist %1 call hello.exe
echo.
popd
```

hello.c

```c
#include <stdio.h>

int main()
{

    printf("Hello , world called from batch file ... :)");

    return 0;
}
```

Output :-

```
D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\2>batch2.bat
Hello , world called from batch file ... :)
D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\2>
```

3. Create an employee table in database and insert records in it. This should be done by calling the SQL script from the batch code.

Code :-

```
@echo off
:: program to run sql script from batch code
:: " Program Files MySQL MySQL Server 8.0 bin mysql.exe" u root p"" msuos
mysql u root password msuos prompt="" e"source D: OS_ASSIGNMMENT Batch
Programming crea teEmpTable.sql"
pause =>nul
```

Output :-

```
Enter password:
+-------+--------+-----------+------+------------+---------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal     | comm    | deptno |
+-------+--------+-----------+------+------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1993-06-13 |  800.00 |    0.00 |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1998-08-15 | 1600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1996-03-26 | 1250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1995-10-31 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1998-12-05 | 1250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1992-06-11 | 2850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1993-05-14 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1996-03-05 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1990-06-09 | 5000.00 |    0.00 |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1995-06-04 | 1500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1999-06-04 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 2000-06-23 |  950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1997-12-05 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 2000-01-21 | 1300.00 |    NULL |     10 |
+-------+--------+-----------+------+------------+---------+---------+--------+
```

4. Display the arithmetic table of 'n' (or 2). This value n should be supplied by the user from the command prompt.

Code :-

batch4.bat

```
@echo off

set input=

set /p input=Enter n :

if  %input%=="" set /a input=2

for /l %%i in (1,1,10) do call arithmatic.bat %%i %input%
```

arithmetic.bat

```
@echo off

set input=
set /a input =(%1) *(%2)

echo %2 * %1 =%input%
```

Output :-

```
D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\4>batch4.bat
Enter n :7
7 * 1 =7
7 * 2 =14
7 * 3 =21
7 * 4 =28
7 * 5 =35
7 * 6 =42
7 * 7 =49
7 * 8 =56
7 * 9 =63
7 * 10 =70
```

5. Call a batch program 2 from another batch program1. Batch program2 should be creating a user usr1 and also create its home path as C:\BE32\usr1.

Code :-

Batch5-1.bat

```
@echo off
call batch5-2.bat
```

batch5-2.bat

```
@echo off
echo Hello From Batch5 2
echo displaying users
echo.
net user
echo crating new user BE301
echo.
net user /add BE301 smitshah
```

Output :-

```
D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\5>batch5-1.bat
Hello From Batch5 2
displaying users


User accounts for \\SMIT-LAPTOP

-------------------------------------------------------------------------------
Administrator              ASUS                       DefaultAccount
Guest                      WDAGUtilityAccount
The command completed successfully.

crating new user BE301

The command completed successfully.


D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\5>net user

User accounts for \\SMIT-LAPTOP

-------------------------------------------------------------------------------
Administrator              ASUS                       BE301
DefaultAccount             Guest                      WDAGUtilityAccount
The command completed successfully.


D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\5>
```

6. Copy all the .txt files from C:\D1 to three directories D:\D1, D:\D2, D:\D3.

Code :-

```
@echo off
:: Program to copy text files

for %%i in (1,1,3) do copy d:\temp\*.txt d:\d%%i
```

Output :-

```
D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\6>batch6.bat
d:\temp\combined.txt
d:\temp\fte.txt
d:\temp\harsh.txt
d:\temp\msu.txt
d:\temp\renamed.txt
d:\temp\smit.txt
        1 file(s) copied.
d:\temp\combined.txt
d:\temp\fte.txt
d:\temp\harsh.txt
d:\temp\msu.txt
d:\temp\renamed.txt
d:\temp\smit.txt
        1 file(s) copied.
d:\temp\combined.txt
d:\temp\fte.txt
d:\temp\harsh.txt
d:\temp\msu.txt
d:\temp\renamed.txt
d:\temp\smit.txt
        1 file(s) copied.

D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\6>
```

7. Your current directory is C:\D1, which contains some batch code which involves another batch file lying in D:\D1. From batch program1 go to path of batch program2, execute it and come back to original path.

Code :-

```
@echo off
@REM Program to call batch program at another location and coma back
pushd d:\temp
call c:\temp\hello.bat
popd
```

Output :-

```
D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\7>batch-7.bat
hey there hello from c drive

D:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch Programs\7>
```

8. Execute a batch code from a C program.

Code:-

Batch8.bat

```
@echo off

@REM This code is being run from c program

echo you are in batch code...
```

call.c

```c
#include <stdio.h>
#include<stdlib.h>

int main(){

printf("\n Running batch program from following cc code");
system("batch8.bat");
   return 0;
}
```

Output :-

```
[Running] cd "d:\Professional\Study Materials\SEM 6\LAB-WORK--SEM-VI\OS LAB\Assignment-2\Batch
you are in batch code...

 Running batch program from following cc code
[Done] exited with code=0 in 7.966 seconds
```