Assignment 1:-

Ans (1) ls –l

Ans (2)

Ans (3) $? (if return 0 means command successful execute)

Ans (4) echo “Enter the file name”

Read file

If [ -f /home/bbpo/$file ] then

echo “file exist”

else

echo “file is not exist”

fi

Ans (5) echo “Enter length”

read length

echo “Enter breadth”

read breadth

area =’echo $length \\* $ breadth ‘

echo “Area of rectangle : $area “

Ans (6)

NOW $(date + “%mm-%dd-%yy”)

Echo $NOW

Echo $SHELL

Echo users |wc –w

My\_script “$(bashname $0)”

Echo $my\_script

Ans (7) head -10 |tail -1

Ans (8) cat file.txt |wc -lw

Ans (9) touch file1.txt

Chmod 400 file.txt

Ans (10) uname –a

Ans (11) using “scp” command

Ans (12) for file is 666 and for directory 777

Ans(13) find /home –name ‘\*.txt’

and

locate “filename”

Ans(14) 644(which is 110 100 100 i.e rw- r-- r--) read and write for user and read only for group and others

Ans(15) using curl and wget command

Curl “https://www.google.com (show the file data)

Wget “https://www.google.com(download the file data)

Ans(16) mkdir -p spice/grooming/school/dehradun

Ans(17) kernal

Ans(18) All of the above

Ans(19) cd

Ans(20) command mode and insert mode

Ans(21) ls -lrt |grep .txt and ls -a -l “\*.txt”

Ans(22) cat file1 file2 >> file3

Ans(23) change the permission of the group to read and write only g+rw

LINUX ASSIGNMENT 2

#! /bin/sh

# Q.1 Greatest among 2 nos assuming that both are not equal.

echo "enter the first no."

read a

echo "enter the second number"

read b

if [ $a -gt $b ]

then

echo "$a is greater"

else

echo "$b is greater"

fi

"shubham\_1.sh" 12L, 147C 1,1 All

Q.2 Write a shell script to compare two nos.

echo "enter the first no."

read num1

echo "enter the second no."

read num2

if [ $num1 -eq $num2 ]

then

echo "Both are equal"

elif [ $num1 -gt $num2 ]

then

echo "$num1 is greater"

else

echo "$num2 is greater"

fi

"shubham\_2.sh" 15L, 214C 1,1 All

Q.3 Write a shell script to print an error msg if the argument are not passed.

vim shubham\_3.sh

var1=$1

var2=$2

if [ $# -eq 0 ]

then

echo "arguments are not passed!!!!!!"

else

echo "arguments are $1 and $2"

fi

Q.5 Write a shell script to copy the content of 2 file into the third and count the total no. of lines in 3 file.

vim shubham\_5.sh

echo "Hello">file1.txt

echo "This is a Grooming School">file2.txt

vim file3.sh

cat file1.txt>file3.txt;cat file2.txt>>file3.txt;

cat file3.txt

Q.6 Write a shell script to check whether file exists or not.

vim shubham\_6.sh

echo "Enter the file name"

read filename

if [ -f $filename ]

then

echo "$filename file exists"

else

echo "$filename file does not exists"

fi

Q.7 Write a shell script to check whether string is null or not.

vim shubham\_7.sh

echo "enter the string"

read string

if [ ! $string ]

then

echo "null string"

else

echo "Your string is $string"

fi

Q.8 Write a shell script to compare 2 strings.

vim shubham \_8.sh

echo -n "Enter the first string";

read string1

echo -n "Enter the second string";

read string2

if [ $string1 = $string2 ]

then

echo "Strings are equal"

else

echo "Strings are not equal"

fi

"shubham\_q8.sh" 13L, 193C

Q.9 Write a shell script to check whether given file is regular or not.

vim shubham\_9.sh

echo "enter the file name"

read file

if [ -f $file ]

then

echo "$file is regular file"

else

echo "$file is not regular file"

fi

"shubham\_9.sh" 11L, 132C 1,1 All

Q.10 Write a script to check whether given file is directory or not.

vim shubham\_10.sh

echo "enter the directory name"

read directory

if [ -d $directory ]

then

echo "$directory is directory"

else

echo "$directory is not a directory"

fi

"shubham\_10.sh" 11L, 153C 10,1 All

Q.11 Write a shell script to read file line by line.

while IFS = read -r line

do

echo $line

done<$1

"shubham\_11.sh" 6L, 52C 1,0-1 All

Q.12 Write a shell script to display table data from database.

mysql -u{root} -p{root} ${shubham} -N -e "select \* from shubham" | while IFS = read -r ROW

do

echo ${ROW}

done

Q.13,14 Write a shell script to count total no. of words,characters,lines in a string in format

Total lines are

Total words are   
Total characters are

vim shubham\_13.sh

string= "shubham aggarwal"

echo "Total lines are "$string | wc -l

echo "Total words are "$string | wc -w

echo "Total characters are "$string | wc -c

"shubham\_13.sh" 5L, 150C 1,1 All

Q.15 Write a shell script to find greatest among three nos.

vim shubham\_15.sh

echo "Enter the three numbers"

read num1

read num2

read num3

if [ $num1 -gt $num2 && $num1 -gt $num3 ]

then

echo "$num1 is greater"

elif [ $num2 -gt $num1 && $num2 -gt $num3 ]

then

echo "$num2 is greater"

else

echo "$num3 is greater"

fi

"shubham\_15.sh" 15L, 240C 1,1 All

Q.19 Write a script to calculate the salary of an employee:

If basic salary<1500

hra=10% of basic salary

da=90% of basic salary

If basic salary>=1500

hra=500

da=98% of basic salary

echo "enter the basic salary"

read sal

if [ $sal -lt 1500 ]

then

echo "hra=`expr $sal \\* 10 \/ 100`"

echo "da=`expr $sal \\* 90 \/ 100`"

else

echo "hra=500"

echo "da=`expr $sal \\* 98 \/ 100`"

fi

"shubham\_19.1.sh" 11L, 196C 1,1 All

Q.20 Write a script to copy the content of 1 file into another.

echo "Hello">file1.txt

vim file20.sh

cat file1.txt>file20.txt

cat file3.txt

Q.21 Write a script to perform all file operations.

echo "list of files"

ls

echo "hidden files"

ls -a

echo "list of files with size"

ls -lh

echo "list of directories"

ls -d \*/

echo "reverse order of files"

ls -r

"shubham\_21.sh" 11L, 161C 1,1 All

Q.22 Write a script to print lines from 5 to 10 lines of a file.File name should be given at command line.

echo "enter the file name"

read file

echo "content of file are"

head -10 $file | tail -5

"shubham.22.sh" 5L, 90C 1,1 All

Q.23 Write a script to find a number is even or odd.

echo "enter the number"

read a

if [ `expr $a \% 2` -eq 0 ]

then

echo "$a is even"

else

echo "$a is odd"

fi

"shubham.23.sh" 9L, 109C 1,1 All

Q. 24 Write a script to check whether the string is palindrome.

echo "enter the string"

read str

echo

len=`echo $str | wc -c`

len=`expr $len - 1`

i=1

j=`expr $len \/ 2`

while [ $i -le $j ]

do

k=`echo $str | cut -c $i`

l=`echo $str | cut -c $len`

if [ $k != $l ]

then

echo "string is not palindrome"

exit

fi

i=`expr $i + 1`

len=`expr $len - 1`

done

echo "string is palindrome"

"shubham\_24.sh" 21L, 315C 1,1 All

Q.25 Write a script to rename file as logname.

echo "enter the file name"

read file

mv $file logname

echo "file name changed to logname”

"shubham\_25.sh" 5L, 91C 1,1 All

Q.26 Write a script to concatenate two strings.

echo "enter the two strings"

read s1

read s2

echo "concatenated string is $s1 $s2"

"shubham.26.sh" 5L, 84C 1,1 All

Q.27 Write a script to calculate the % and display the division of student.

echo "enter the marks of english out of 100"

read eng

echo "enter the marks of hindi out of 100"

read hin

echo "enter the marks of maths out of 100"

read math

echo "enter the marks of science out of 100"

read sci

echo "enter the marks of social studies out of 100"

read sst

sum=`expr $eng + $hin + $math + $sci + $sst`

per=`expr $sum \\* 100 \/ 500`

echo "$per%"

if [ $per -gt 80 ]

then

echo "1st division"

elif [ $per -gt 60 ]

then

echo "2nd division"

elif [ $per -gt 33 ]

then

echo "3rd division"

else

echo "fail"

fi

"shubham\_27.sh" 26L, 521C 1,1 Top

Q.28 Write a script to change the file content from uppercase to lowercase.

echo "enter the file name"

read file

if [ -f $file ]

then

echo "converting uppercase to lower case"

tr '[A-Z]' '[a-z]'<$file

else

echo "$file does not exists"

fi

"shubham\_28.sh" 10L, 164C 1,1 All

Q.31 Write a script to print series 12345......

echo "enter the limit"

read lim

num=1

while [ $num -le $lim ]

do

echo -n "$num "

num=`expr $num + 1`

done

echo

"shubham\_31.sh" 11L, 116C 1,0-1 All

Q.32 Write a script to print series 1

2

3

4..........

echo "enter the limit"

read lim

num=1

while [ $num -le $lim ]

do

echo $num

num=`expr $num + 1`

done

"shubham\_31.sh" 10L, 104C 1,0-1 All

Q.33 Write a script to print series 1 4 9 16 25............

echo "enter the limit to print the series"

read n

i=1

while [ $i -le $n ]

do

echo -n "`expr $i \\* $i` "

i=`expr $i + 1`

done

echo

"shubham\_33.sh" 10L, 132C 1,1 All

Q.34 Write a script to print series 1 8 27 64 125..................

echo "enter the limit to print the series"

read n

i=1

while [ $i -le $n ]

do

echo -n "`expr $i \\* $i \\* $i` "

i=`expr $i + 1`

done

echo

"shubham\_34.sh" 10L, 132C 1,1 All

Q.35 Write a script to print factorial of a number.

echo "Enter the limit"

read lim

fact=1

while [ $lim -gt 1 ]

do

echo -n "$lim\*"

fact=`expr $fact \\* $lim`

lim=`expr $lim - 1`

done

echo "1=$fact"

"shubham\_35.sh" 12L, 148C 1,1 All

Q.36 Write a script to print fibonacci series.

echo "enter the limit"

read n

x=0

y=1

i=2

echo "series is"

echo $x

echo $y

while [ $i -lt $n ]

do

i=`expr $i + 1`

z=`expr $x + $y`

echo $z

x=$y

y=$z

done

"shubham\_36.sh" 19L, 157C 1,1 All

Q.37 Write a script to print series: 1-2+3-4+5

echo "enter the limit"

read lim

num=1

while [ $num -le $lim ]

do

echo -n $num

if [ `expr $num \% 2` -eq 0 ]

then

echo -n +

else

echo -n -

fi

num=`expr $num + 1`

done

echo

"shubham\_37.sh" 16L, 173C 1,1 All

Assignment 1:JAVA

1. Write a Java program to replace all the 'd' characters with 'f' characters.
2. Write a Java program to convert all the characters in a string to lowercase.
3. Write a Java program to convert all the characters in a string to uppercase
4. Write a Java program to trim any leading or trailing whitespace from a given string.
5. **Write Java program to check if a number is palindrome in Java.**
6. **. Write Java program to check if a number is Armstrong number or not**
7. **Print following structure in Java**



1. **How to reverse a string in java?**
2. **How do you remove all white spaces from a string in java.**
3. **W.a.p to check whether two strings are anagram or not.**
4. **How to find sum of all digits of a number in java.**

Ans 1:-

public class Ques1 {

public static void main(String[] args)

{

String str=args[0];

String a=args[1];

String b=args[2];

String new\_str = str.replace(a, b);

System.out.println("Original string: " + str);

System.out.println("New String: " + new\_str);

}

}

Ans 2:-

public class Ques2 {

public static void main(String[] args)

{

String str=args[0];

String lowerStr = str.toLowerCase();

System.out.println("Original String: " + str);

System.out.println("String in lowercase: " + lowerStr);

}

}

Ans 3:-

public class Ques3 {

public static void main(String[] args)

{

String str=args[0];

String upper\_str = str.toUpperCase();

System.out.println("Original String: " + str);

System.out.println("String in uppercase: " + upper\_str);

}

}

Ans 4:-

public class Ques4 {

public static void main(String[] args)

{

String str=args[0];

String new\_str = str.trim();

System.out.println("Original String: " + str);

System.out.println("New String: " + new\_str);

} }

Ans 5:-

public class Ques5 {

public static void main(String args[])

{

int n = Integer.parseInt(args[0]);

int sum = 0, r;

int temp = n;

while(n>0)

{

r = n % 10;

sum = (sum\*10)+r;

n = n/10;

}

if(temp==sum)

System.out.println("It is a Palindrome number.");

else

System.out.println("Not a palindrome");

}

}

Ans 6:-

class Ques6{

public static void main(String[] args) {

int c=0,a,temp;

int n = Integer.parseInt(args[0]); //153

temp=n;

while(n>0)

{

a=n%10;

n=n/10;

c=c+(a\*a\*a);

}

if(temp==c)

System.out.println("armstrong number");

else

System.out.println("Not armstrong number");

}

}

Ans 7:-

public class Ques7

{

public static void main(String[] args)

{

int rows = Integer.parseInt(args[0]);

System.out.println("Here is your pattern....!!!");

for (int i = 1; i <= rows; i=i+2)

{

for (int j = 1; j <= i; j++)

{

System.out.print("\*");

}

System.out.println();

}

for (int i = rows-2; i >= 1; i=i-2)

{

for (int j = 1; j <= i; j++)

{

System.out.print("\*");

}

System.out.println();

}

}

}

Ans 8:-

public class Ques8 {

public static void main(String[] args) {

String input="";

System.out.println("Enter the input string");

input = args[0];

char[] try1= input.toCharArray();

for (int i=try1.length-1;i>=0;i--)

System.out.print(try1[i]);

}

}

Ans 9:-

class Ques9{

public static void main(String[] args){

String str =args[0];

String res ="";

for (int i = 0; i < str.length(); i++)

if( !Character.isWhitespace(str.charAt(i)))

res+=str.charAt(i);

System.out.println("["+res+"]");

}

}

Ans 10:-

public class Ques10

{

public static void main(String[] input)

{

String str1, str2;

int len, len1, len2, i, j, found=0, not\_found=0;

str1 = args[0];

str2 = args[1];

len1 = str1.length();

len2 = str2.length();

if(len1 == len2)

{

len = len1;

for(i=0; i<len; i++)

{

found = 0;

for(j=0; j<len; j++)

{

if(str1.charAt(i) == str2.charAt(j))

{

found = 1;

break;

}

}

if(found == 0)

{

not\_found = 1;

break;

}

}

if(not\_found == 1)

{

System.out.println("Strings are not Anagram to Each Other..!!");

}

else

{

System.out.println("Strings are Anagram");

}

}

else

{

System.out.println("Both Strings Must have the same number of Character to be an Anagram");

}

}

}

Ans 11:-

Ques11

{

public static void main(String[] args)

{

int a,num,sum=0;

num=args[0];

while(num>0)

{

a=num%10;

num=num/10;

sum=sum+a;

}

System.out.println("Sum of Digits :"+sum);

}}

|  |  |  |  |
| --- | --- | --- | --- |
| **Technology Name :** | | | |
| **Details given by:** | | **Assignment Given** | |
| **Date and day of session:26may17** | |
| **S.no** | **Sub - Topic Name** | **Theory** | **Practical** |
| **1**  **2** | **JAVA:Inner classes**  **DBMS: order by,group by,having,in and between keywords.** | Q1) What is an inner class?**Q2) What are the different types of inner classes?**  **Q3)What are the advantages of Inner classes?** | **WAP to each type of inner class.**  **Write quires to specify use of order by, group by,having,in and between keywords.** |

**Member class** - Classes declared outside a function (hence a "member") and not declared "static".  
The member class can be declared as public, private, protected, final and abstract. E.g.

public class InnerClass {

class MemberClass {

public void method1() { }

}

}

**Method local class** –

public class InnerClass {

int i = 9;

public void method1() {

final int k = 6;

class MethodLocal {

MethodLocal() {

System.out.println(k + i);

}

} } }

**Anonymous inner class**

public class MyFrame extends JFrame {

JButton btn = new JButton();

MyFrame() {

btn.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {}

});

}

}

//Anonymous class used with comparator

List<Parent> l = new ArrayList<Parent>();

l.add(new Parent(2));

l.add(new Parent(3));

Collections.sort(l, new Comparator() {

public int compare(Object o1, Object o2) {

Parent prt1 = (Parent) o1;

Parent prt2 = (Parent) o2;

if (prt1.getAge() > prt2.getAge()) {

return -1;

}else if(prt1.getAge()<prt2.getAge()) {

return 1;

} else {

return 0;

}

}

});

Static inner class:-

**class** TestOuter1{

**static** **int** data=30;

**static** **class** Inner{

**void** msg(){System.out.println("data is "+data);}

  }

**public** **static** **void** main(String args[]){

  TestOuter1.Inner obj=**new** TestOuter1.Inner();

  obj.msg();

  }  }

Ans 2:-

OrderBy:-

SELECT \* FROM Customers  
ORDER BY Country;

GroupBy

SELECT COUNT(CustomerID), Country  
FROM Customers  
GROUP BY Country;

Having

SELECT COUNT(CustomerID), Country  
FROM Customers  
GROUP BY Country  
HAVING COUNT(CustomerID) > 5;

In

SELECT \* FROM Customers  
WHERE Country IN ('Germany', 'France', 'UK');

Between

SELECT \* FROM Products  
WHERE Price BETWEEN 10 AND 20;

Ans 1.- Even odd program:-

class EvenOdd

{

public static void main(String []args)

{

int a=Integer.parseInt(args[0]);

int x,y;

x=4;

y=1;

System.out.println(x&y);

if( (a&1) == 0)

{

System.out.println("even number");

}

else

System.out.println("odd number");

}

}

Ans 2:-Multilevel Interface program.

class MultilevelInterface

{

public static void main(String []args)

{

Main obj=new Main();

obj.methodA();

obj.methodB();

}

}

interface A{

public void methodA();

}

interface B extends A{

public void methodB();

}

class Main implements B{

public void methodA() { System.out.println("multilevel Interface");

System.out.println("method A of Interface A");

}

public void methodB()

{

System.out.println("method B of Interface B");

}

}

Ans 3:- multiple Interface program

class multipleInter {

public static void main(String []args)

{

Result r=new Result();

r.methodA();

r.methodB();

}

}

interface ABC

{

public void methodA();

}

interface XYZ

{

public void methodB();

}

class Result implements ABC,XYZ

{

public void methodA()

{

System.out.println("multiple Interface");

System.out.println(" method A of Interface A");

}

public void methodB()

{

System.out.println("method B of Interface B");

}

}

Ans 4:- Swap of two numbers

import java.util.\*;

class Swap

{

public static void main(String []args)

{

int a,b,c;

a=Integer.parseInt(args[0]);

b=Integer.parseInt(args[1]);

System.out.println(a+" "+b);

c=a;

a=b;

b=c;

System.out.println(a+" "+b);

}

}