

**Shah**

1. Write a program to generate first 50 prime numbers .(Use all types of loops)
2. Write a program that accepts two command line arguments of type double, multiply them and display their product.
3. Write a program that accepts radius of a circle and display area of circle.
4. Write a program that displays number of milliseconds between current date and midnight.
5. Write a program to accept one command line argument ,convert it to double and then display the square root.
6. Write a program that prints numbers between 17 and 100 that are evenly divisible by 17.
7. Write a program that displays all the possible factors of a particular number. 8. Write a program that prints numbers from 1 to 100 using five columns.
9. Write a program that accepts one command line argument, convert it to integer and decrement its value in a loop. Sound the bell when value reaches 0. (Bell character: \v0007).
10. Write a program that declares a class Person. It should have instance variable to record name , age and salary of type string , integer and float .Set and display these properties.

#### Assignment-2

1. Write a java program to add two matrices of same size.
2. Write a java program to get environment variables USERNAME, TEMPNAME and PATH.
3. Write an application that defines a Circle class with two constructors .The first form accepts a double value that represents the radius of the circle .This constructor assumes that the circle is centered at origin .The second form accepts three double values .The first two arguments defines the coordinates of the center and the third argument defines the radius .Create 10 objects of the Circle type and save them in the array. Randomly select a radius between 1 and 10 cm for each circle created .After all circles have been created display each circle and total area of all circles.
4. Write a program to remove duplicate characters from the string.
5. Write a program to print the pattern using for loop

1 1 1

2 4 8

3 9 27

.....

10 100 1000

6. Write a java program to accept distance in metres , time in hours , minutes and seconds . Calculate the speed in m/sec , km/hr and miles/hr . (1 mile = 1609 m).

7. Write a program to get java version, runtime version , java vendor name , java vendor url and

8. Create an abstract class "Monster" which is extended by three classes "Ware wolf ","Zombie" and "Vampire" . Create 6 types of Monsters in single dimension array and print them.

9. Write a program to accept a string from user and a point from where you want to print next three words. Print the old and the new string.

Old String = "The quick brown fox jumps over the lazy dog"

New String = "brown fox jumps"

10. Convert Minutes into years and days

For Eg. Input => 3456789

Output => 6 Years and 210 days

WAP to display environment variables like PATH, TEMP, USERNAME

11.(A) Create a class Inventory having item\_id, Description, price as member variable. Create necessary constructors and methods.

Create a class Bill\_Item having quantity, amount (amount = quantity \* price) as member variable. Create necessary constructors and methods.

Create a Main class which will create 5 instances. Generate invoice.

(B) Take a string from user. Find the occurrences of a word. And print that word in reverse order.

12.(A) Write a program Addition of two binary numbers

Example:

Input: Binary number 1: 101

Binary number 2: 011

Output: 1000

(B) Print following pattern

J a v v a

J a a v v a a

JJ aaaaa v v aaaaa

JJ a a v a a

13)

A. Print Face

```
+~~~~~+
```

```
[| 0 0 |]
```

```
| ^ |
```

```
| _ |
```

```
+-----+
```

B.Print following pattern.

1

01

101

0101

10101

010101

14)Create an employee class which has attributes : empid , fname , lname, salary, designation, bonus .It has all the necessary constructors (at least 2) and methods.It must have one abstract method calculate\_bonus().

-Create 2 subclasses :Clerk & Manager

- Clerk has the additional attribute-No. of hrs worked ,

- Manager has the attribute – No. of projects managed

- Both the subclasses must have necessary constructor (at least 2) and

methods - Create an array of five employees ,read the details and display the details

- Calculate the bonus on the following criteria :

- Clerk –No. of hrs worked>250 then for each extra hour 200 Rs Bonus

- Manager –No. of projects managed \*1000