**Experiment 2**

**Source Code**

package experiment2t;

import java.util.\*;

public class Experiment2T {

public static void mark(Scanner sc){

System.out.println("Enter marks of the student");

int m = sc.nextInt();

if(m>=80){

System.out.println("Congratulations! Awesome score");

}else if(m>=70){

System.out.println("Congratulations! You did well");

}else if(m>=60){

System.out.println("You need to work hard");

}else if(m>=50){

System.out.println("Work hard next time");

}else{

System.out.println("Oops! Sorry but you didn't make it");

}

}

public static void area(Scanner sc){

int n;

double ar;

System.out.println("Enter the radius of circle: ");

n = sc.nextInt();

ar = 3.14\*n\*n;

System.out.println("Area is : "+ar);

}

public static void sumavg(Scanner sc){

float [] a = new float[10];

float sum=0;

float avg=0;

System.out.println("Enter the elements of array: ");

for(int i=0;i<10;i++){

a[i] = sc.nextInt();

sum+=a[i];

}

avg = sum/10;

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

System.out.println("Average is : "+avg);

}

static void showpush(Stack st, int a) {

st.push(new Integer(a));

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

System.out.println("stack: " + st);

}

static void showpop(Stack st) {

System.out.print("pop -> ");

Integer a = (Integer) st.pop();

System.out.println(a);

System.out.println("stack: " + st);

}

public static void stackop() {

Stack st = new Stack();

System.out.println("stack: " + st);

showpush(st, 42);

showpush(st, 66);

showpush(st, 99);

showpop(st);

showpop(st);

showpop(st);

try {

showpop(st);

} catch (EmptyStackException e) {

System.out.println("empty stack");

}

}

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

System.out.println("Enter a choice:\n 1 For Marks\n 2 For area \n 3 For sum Average\n 4 For stack");

int choice=sc.nextInt();

switch(choice){

case 1:mark(sc);

break;

case 2:area(sc);break;

case 3:sumavg(sc);break;

case 4: stackop();break;

}

}

}



