**Hands-On**

Program 1:

import java.util.ArrayList;

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

ArrayList<Integer> l=new ArrayList<Integer>();

Scanner s=new Scanner(System.in);

int sum1=0;

int n=s.nextInt();

int sum2=0;

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

l.add(s.nextInt());

if(i%2 ==0){

if(l.get(i)%2 == 0){

sum1 = sum1+l.get(i);

}}

else{

if(l.get(i)%2 !=0)

sum2 = sum2+l.get(i);

} }

System.out.println(sum1+sum2);

}

}

Program 2:

import java.util.ArrayList;

import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

ArrayList<Integer> l=new ArrayList<Integer>();

Scanner s=new Scanner(System.in);

int sum1=0;

int n=s.nextInt();

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

l.add(s.nextInt());

if(i%2 !=0){

sum1 = sum1+l.get(i);

}

}

System.out.println(sum1);

}

}

Program 3:

 import java.util.Comparator;

import java.util.Scanner;

public class TeamComparator implements Comparator<Team>{

@Override

public int compare(Team t1, Team t2) {

if(t1.getNoOfMatches() == t2.getNoOfMatches())

return 0;

else if(t1.getNoOfMatches() > t2.getNoOfMatches())

return 1;

else

return -1;

}

}

class Team {

private String name;

private long noofmatches;

public String getName( ){

return name;

}

public String getNoOfMatches( ){

return noofmatches;

}

public void setName( String name ){

this.name=name;

}

public void setNoOfMatches( String noofmatches){

this.noofmatches=noofmatches;

}

public Team( String name, long noofmatches) {

this.name = name;

this.noofmatches = noofmatches;

}

@Override

public String toString() {

return name+"- "+noofmatches ;

}

}

public class Main {

public static void main(String... args) {

Scanner s= new Scanner(System.in);

System.out.println("Enter number of teams: ");

int n=s.nextInt();

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

System.out.println("Enter team "+(i+1)+" detail "+"\nEnter Name");

String name=s.nextLine();

System.out.println("Enter number of matches ");

long noofmatches = s.nextLong();

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

l.add(new Team(name,noofmatches ));

}

Collections.sort(l,new TeamComparator());

System.out.println("Team list after sort by number of matches ");

for( Team t:l){

System.out.println(t);

}

}

}

 Program 4:

import java.util.\*;

import java.util.Scanner;

public class Player{

private String name;

private String team;

private String skill;

public String getName(){

return name;

}

public void setName(String name){

this.name=name;

}

public String getTeam(){

return team;

}

public void setTeam(String team){

this.team=team;

}

public String getSkill(){

return team;

}

public void setSkill(String skill){

this.skill=skill;

}

public Player( String name, String team, String skill) {

this.name = name;

this.team = team;

this.skill=skill;

}

@Override

public String toString() {

return name+"--"+team+"--"+skill;

}

}

public class Main{

public static void main(){

TreeMap<String, Player> map =new TreeMap<> ();

Scanner s=new Scanner(System.in);

System.out.println("Enter the number of players");

int n=s.nextInt();

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

System.out.println("Enter the details of the player "+i);

String k=s.nextLine();

String name=s.nextLine();

String team=s.nextLine();

String skill = s.nextLine();

map.put(k,new Player(name,team,skill ));

}

System.out.println("Player Details");

for(Map.Entry<String, Player> m : map.entrySet()){

System.out.println(m.getKey()+"--"+m.getValue() );

}

}

}