

CHRIST COLLEGE, RAJKOT
Department of computer applications
BCASem–IV[2017-18]
CS-20 :Programming with C#
List of programs

Prog. No.	Definition	File Name	Tentative Date	Sub Date	Journal
1.	Write a program to Display “Welcome to CSharp” on the output screen.	First.cs	13-NOV-2017	18-NOV-2017	No
2.	Write a program to get a number from user and display the given number.	Second.cs	13-NOV-2017	18-NOV-2017	No
3.	Write a program to get two numbers from user, generate and display answer of all four arithmetic operations. Also check and manage the possibility of runtime error for division.	Arith.cs	14-NOV-2017	18-NOV-2017	Yes (J-1)
4.	Write a program to get the name of user and show welcome message with the name.	Welcome.cs	15-NOV-2017	18-NOV-2017	Yes (J-2)
5.	Write a program to get a number and check whether it is odd or even.	OddEven.cs	16-NOV-2017	18-NOV-2017	Yes (J-3)
6.	Write a program to get a number and display whether it is positive, negative or zero.	Sign.cs	16-NOV-2017	18-NOV-2017	No
7.	Write a program to get a number and display its square value.	Square.cs	17-NOV-2017	18-NOV-2017	No
8.	Write a program to get two numbers and display greater number.	Greater.cs	18-NOV-2017	21-NOV-2017	No
9.	Write a program to get three numbers and display greater number.	Greatest.cs	18-NOV-2017	21-NOV-2017	Yes (J-4)
10.	Write a program to get a number to generate and display sum of digits of the number.	Digisum.cs	21-NOV-2017	25-NOV-2017	Yes (J-5)
11.	Write a program to get a number to generate and display reverse of the given number.	Reverse.cs	21-NOV-2016	25-NOV-2017	Yes (J-6)
12.	Write a program to get age of user and display appropriate welcome message.	WelcomeAge.cs	22-NOV-2016	25-NOV-2017	No
13.	Write a program to get a number and display its corresponding month name.	Month.cs	22-NOV-2017	25-NOV-2017	No
14.	Write a program to get a number and check whether it is prime or not.	Primeflag.cs	23-NOV-2017	28-NOV-2017	Yes (J-7)
15.	Write a program to get a number and check whether it is prime or not. (without flag)	Prime.cs	23-NOV-2017	28-NOV-2017	No
16.	Write a program to get range from the user and display all available prime numbers between the given range.	Primerange.cs	23-NOV-2017	28-NOV-2017	Yes (J-8)
17.	Write a program to get a value and check whether it is palindrome or not.	Palindrome.cs	27-NOV-2017	07-DEC-2017	No
18.	Write a program to get a value and check whether it is Armstrong.	Armstrong.cs	27-NOV-2017	07-DEC-2017	Yes (J-9)
19.	Write a program to create an array of size 10, get values from user and display it.	ExaArray.cs	01-DEC-2017	09-DEC-2017	No

20.	Write a program to create an array of size 10, get values from use and display it using foreach loop.	ExaForEach.cs	04-DEC-2017	09-DEC-2017	Yes (J-10)
21.	Write a program to get values for an integer array of size 10 and arrange all values in ascending order and display it.	SelSort.cs	04-DEC-2017	09-DEC-2017	No
22.	Write a program to create a string array to get 10 city names and display it.	CityNames.cs	05-DEC-2017	09-DEC-2017	No
23.	Arrange city names of string array in ascending order.	SortedCities.cs	05-DEC-2017	09-DEC-2017	Yes (J-11)
24.	Write a program to get n store marks of four subjects for 5 students. Generate and Display total n percentage along with marks.	Marksheet.cs	06-DEC-2017	12-DEC-2017	No
25.	Write a program to create a UDF “ShowArrayInfo” with receives an array object as argument and displays no. of dimensions, length of the array along with length and upperbound of each dimension.	ArrayInfo.cs	08-DEC-2017	12-DEC-2017	Yes (J-12)
26.	Write a program to create a UDF named “checkprime” with void return type to check whether given argument is prime or not.	Udfcheckprime.cs	12-DEC-2017	19-DEC-2017	No
27.	Write a program to create a UDF named “checkprime” with bool return type to check whether given argument is prime or not.	Checkprimewr.cs	12-DEC-2017	19-DEC-2017	Yes (J-13)
28.	Write a program to create “swap” UDF to implement call by value.	CallByVal.cs	14-DEC-2017	19-DEC-2017	Yes (J-14)
29.	Write a program to create “swap” UDF to implement call by reference.	CallByRef.cs	15-DEC-2017	19-DEC-2017	Yes (J-15)
30.	Write a program to create a JaggedArray.	EJaggedArray.cs	09-DEC-2017	19-DEC-2017	Yes (J-16)
31.	Write a program to create a UDF, which returns an integer array of factors of the given number, using out parameter to indicate total number of factors found.	FindFactors.cs	20-DEC-2017	03-JAN-2018	Yes (J-17)
32.	Write a program to create a UDF, which receives any number of arguments of integer numbers and assigns minimum and maximum using out parameter.	ExaParams.cs	20-DEC-2017	03-JAN-2018	Yes (J-18)
33.	Write a program to create a class Number with two private data members and two public data members. Define set and disp methods for private data members and make use of it by creating two objects.	ExaClass.cs	03-JAN-2018	10-JAN-2018	Yes (J-19)
34.	Create a class Person with two private data members string name,int age. Define multiple constructors and make use of it by creating objects	ExaConsOver.cs	04-JAN-2018	10-JAN-2018	Yes (J-20)

35.	Write a program to create a class “person” with two private data members to store name and age, also define public static data member count to count the total number of objects created. Also define a static method to return the value of static data member count.	ExaStatic.cs	05-JAN-2018	10-JAN-2018	Yes (J-21)
36.	Write a program to create a static class “Number”. Define three different static methods as follows: 1) to check whether given number is –ve,+ve or zero 2) to check whether given number is prime 3) to return reverse of the given number	StatClass.cs	08-JAN-2018	10-JAN-2018	Yes (J-22)
37.	Write a program to define class person with following members: string name, int age, long income, long expense, and a static data member: long balance. Define required constructors with following two methods: void earned(long inc) void spent(long exp) Initialize family balance with Rs. 12000/-	FamilyBal.cs	08-JAN-2018	13-JAN-2018	Yes (J-23)
32.	Write a program to create a UDF “ShowArrayInfo” which receives an array object as argument and displays no. of dimensions, length of the array along with length and upperbound of each dimension.				Yes (J-18)
33.	Write a program to create a JaggedArray.				Yes (J-19)
34.	Operator Overloading				Yes (J-20)
35.	Create a class TwoDShape with two private data member:double height,double width. Define get/set functions. Create a class Triangle which inherits class TwoDShape. Define a method getarea to return area of the triangle.				No
36.	Create a class TwoDShape with two protected data member:double height,double width. Define set function. Create a class Triangle which inherits class TwoDShape. Define a method getarea to return area of the triangle and disp function to display height and width.				No
37.	Create a class TwoDShape with two private data member:double height,double width. Define both constructors and get/set functions. Create a class Triangle which inherits class TwoDShape. Define required constructors and a method getarea to return area of the triangle also with disp function to show height and width.				Yes (J-21)
38.	Create a class TwoDShape with two private data members:double height, double width. Define				No

	constroctors and protected properties. Create class Triangle, with string style data member, which inherits TwoDShape. Also define class Rectangle, with a private data member IsSquare, which also inherits class TwoDShape. Create objects of Triangle and Rectangle to implement hierarchical inheritance.				
39.	Create a class series with a private data member int val. Define properties like MyVal, NextVal etc.		25-JAN-2017		No
40.	Create a class Result with private data members to store marks of three subjects and generate total, percentage and result. Define required constructors and also create three properties for each subject mark. Allow values between 0 and 100 for the data member.		25-JAN-2017		Yes (J-22)
41.	Create a class SoftArray to implement Indexer.		30-JAN-2017		Yes (J-23)
42.	Create a class IndexedNames and implement Indexer Overloading.		31-JAN-2017		Yes (J-24)
43.	Create class TwoDShape, Triangle and ColoredTriangle to implement Multilevel Inheritance.		01-FEB-2017		No
44.	Create a class TwoDShape with two private data members: double height, double width. Define constructors and protected properties. Also declare double getarea() as virtual function. Create class Triangle, with string style data member, which inherits TwoDShape and override getarea(). Also define class Rectangle, with a private data member IsSquare, which also inherits class TwoDShape and override getarea(). Create objects of Triangle and Rectangle to implement hierarchical inheritance.		06-FEB-2017		Yes (J-25)
45.	Create a class TwoDShape with two private data members: double height, double width. Define constructors and protected properties. Also declare double getarea() as abstract method. Create class Triangle, with string style data member, which inherits TwoDShape and override getarea(). Also define class Rectangle, with a private data member IsSquare, which also inherits class TwoDShape and override getarea(). Create objects of Triangle and Rectangle to implement hierarchical inheritance.		08-FEB-2017		No
46.	Create an interface Iseries with three methods: int GenNext(), void Reset(), void SetStart(int). Create a class MySeries with two private data members: int start, int val. Define appropriate Constructors and define all methods declared in interface.		14-FEB-2017	18-FEB-2017	No
47.	Create an interface Iseries with two methods: void Reset(), void SetStart(int). Also declare two		14-FEB-2017	18-FEB-2017	Yes (J-26)

	properties with get accessor:Next and Val. Create a class MySeries with two private data members:int start, int val. Define appropriate Constructors and define all methods and properties declared in interface.				
48.	Create an interface Inf1 with two methods. And create another interface Inf2 which inherits Inf1. Now create a class which implements Inf2 only. Define and use all methods.		15-FEB-2017	18-FEB-2017	Yes (J-27)
49.	Create an interface Iseries with three methods: int GenNext(), void Reset(), void SetStart(int). Create a class MySeries with two private data members:int start, int val. Define appropriate Constructors and define all methods declared in interface. Also Create another class PrimeSeries which implements Iseries interface. Now create a reference of type Interface and assign it reference of both class object one by one and call GenNext().		15-FEB-2017	18-FEB-2017	Yes (J-28)
50.	Implement Explicit Implementation of Interface.		16-FEB-2017	18-FEB-2017	Yes (J-29)