Semester	Course Code	Course Title
Autumn 2024-25	IT101	Computer Programming and Problem Solving

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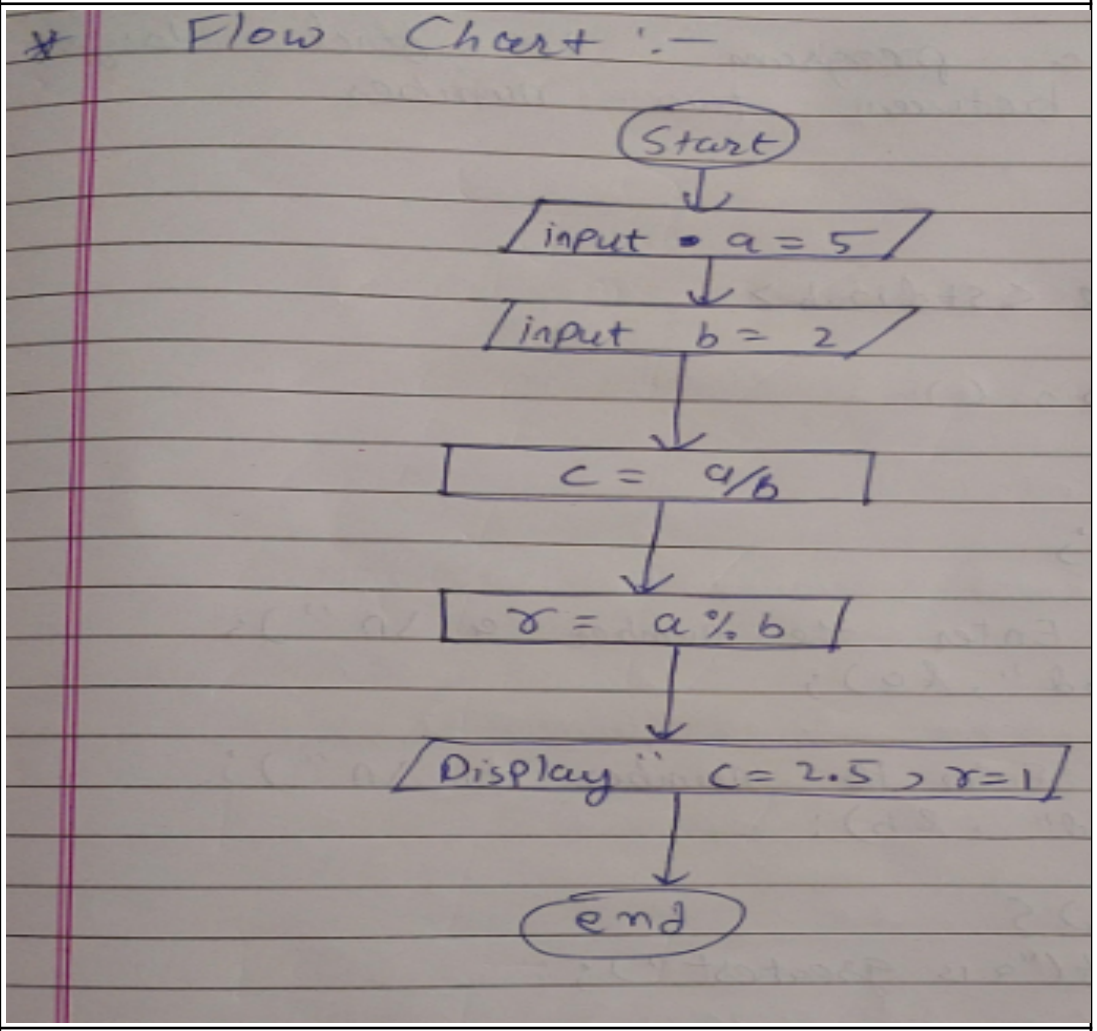
As.No.	3
Assessment Title.	Introducing control statements (if-else, while)
Date of Submission	19-Sept-2024

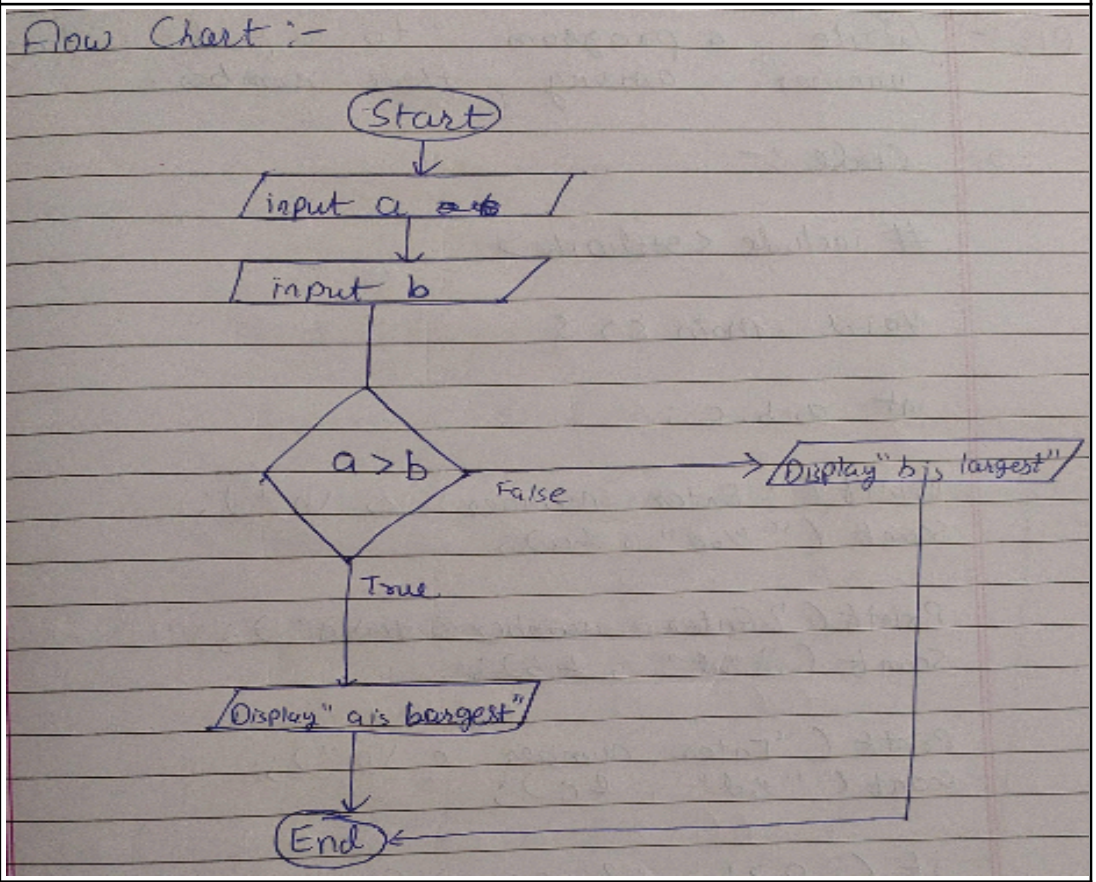
1. Write a program to find the division (Overall division 5/2 = 2.5) and modulo division (as discussed in class).
2. Write a program to find the largest number between two numbers.
3. Write a program to find the largest number among three numbers.
4. Write a program to determine if the entered year is a leap year or not.
5. Write a program to display numbers from 0 to n, where n is input by the user.
6. Write a program to display even and odd numbers between 0 and n, where n is input by the user.
7. Write a program to print the multiplication table of any number.
8. Write a program to find how many numbers divisible by 3 exist in the first n numbers, where n is input by the user.

Question 1	Write a program to find the division (Overall division 5/2 = 2.5) and modulo division (as discussed in class).
Flow chart	

Program or Related Content	#include <stdio.h>
	
	Name: Rajveer Chaudhari
	Roll no.: 202411024
	
	void main(){
	
	int a,b,c;
	
	float c;
	printf("Enter value of a:\n");
	scanf("%d",&a);
	printf("Enter value of b:\n");
	scanf("%d",&b);
	c = (float)a/b;
	printf("Division fo Two no is %.2f\nModulo Division of Two no is %d\n",c,(a%b));
	
	}

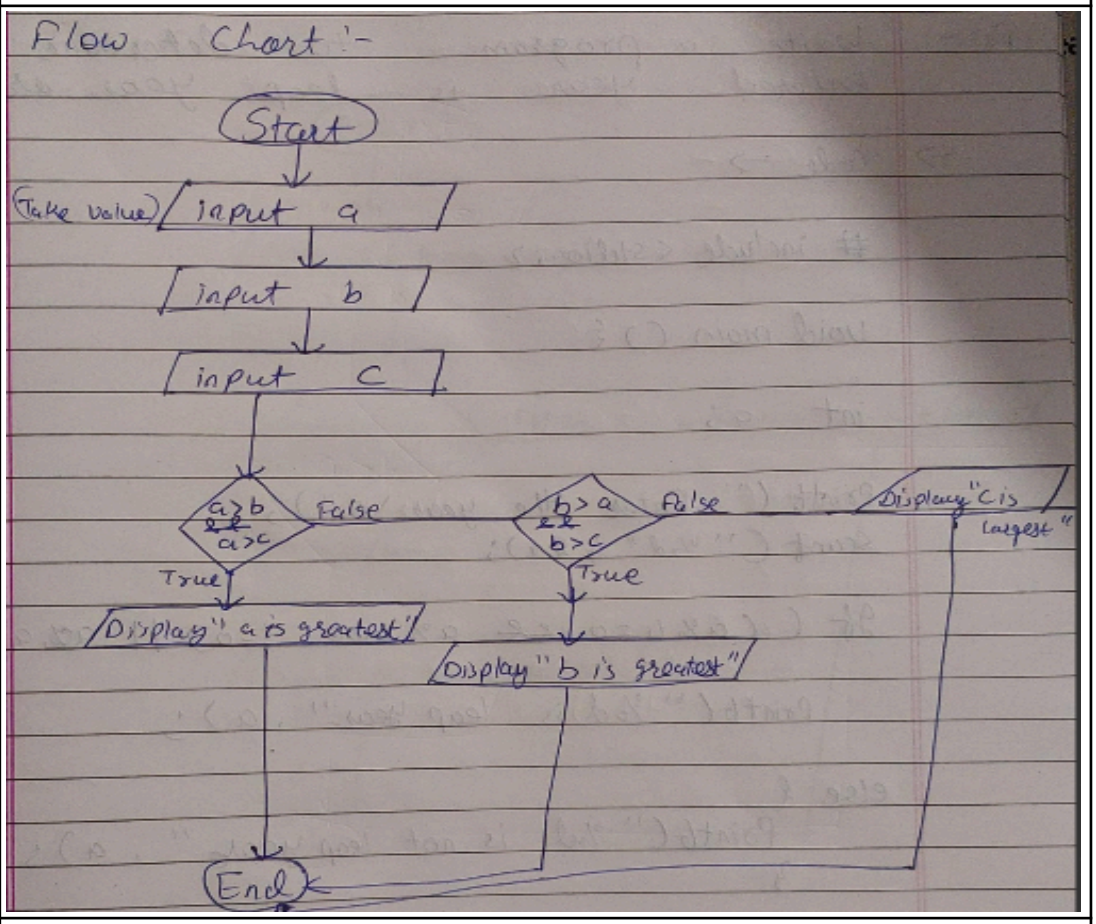
Output:	Enter value of a: 5 Enter value of b: 2 Division fo Two no is 2.50 Modulo Division of Two no is 1

Your Observation	"/" operator is used to divide two number "%" operator is used t ofind the remainder of number

Question 2	Write a program to find the largest number between two numbers.
Flow chart	

Program or Related Content	#include <stdio.h>
	
	Name: Rajveer Chaudhari
	Roll no.: 202411024
	
	void main(){
	
	int a,b;
	printf("Enter value of a:\n");
	scanf("%d",&a);
	printf("Enter Value of b:\n");
	scanf("%d",&b);
	
	if(a>b){
	printf("a is biggest\n");
	}
	else{
	printf("b is biggest\n");
	}
	
	}
	
	}

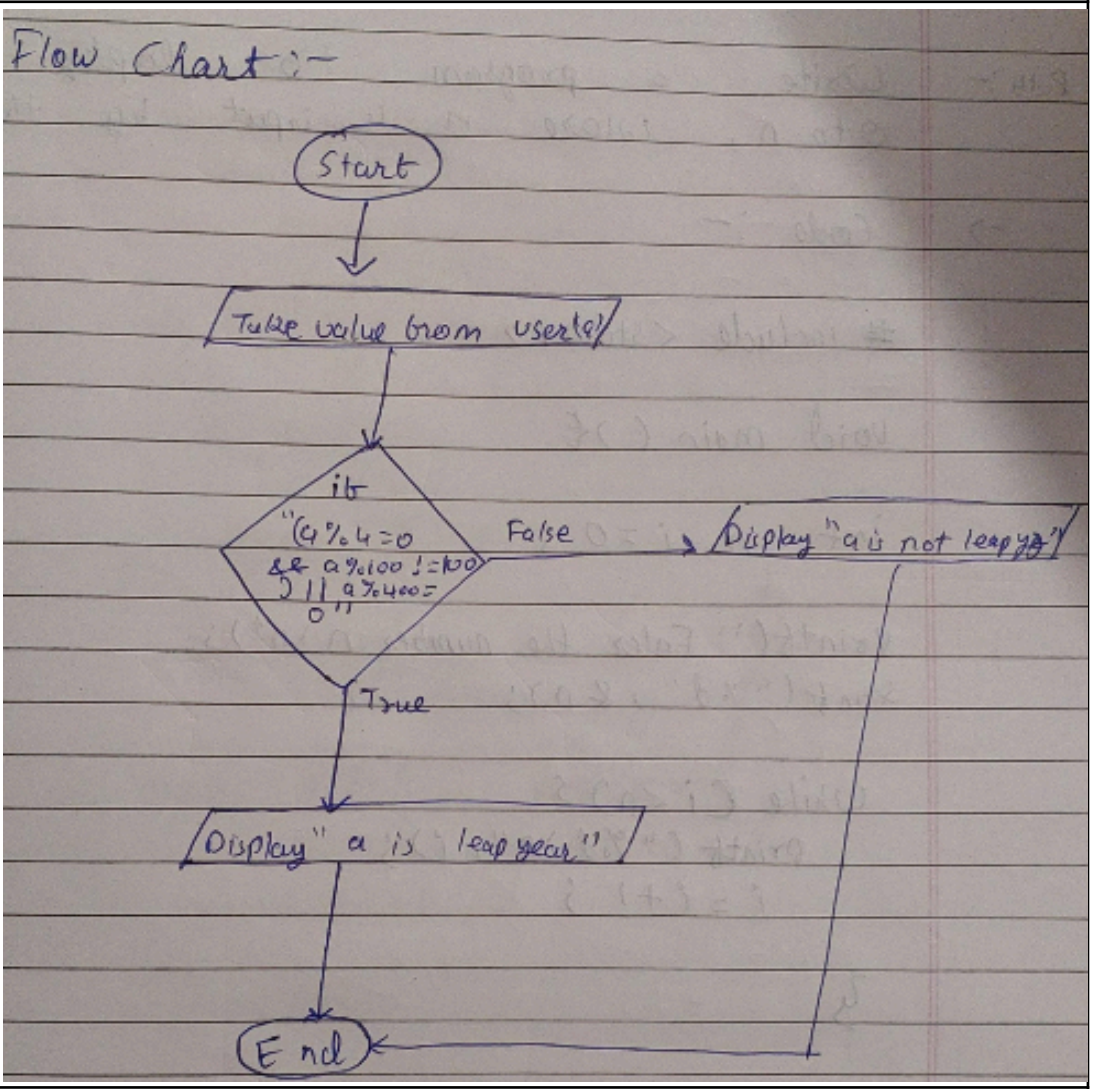
Output:	Enter value of first no: 69 Enter Value of Second no: 36 a is biggest
Your Observation	Here we gave value to two number and check which is greater

Question 3	Write a program to find the largest number among three numbers.
Flow chart	

Program or Related Content	#include <stdio.h>
	
	Name: Rajveer Chaudhari
	Roll no.: 202411024
	
	Void main()
	{
	int a,b,c;
	
	printf("enter value of a\n");
	scanf("%d",&a);
	
	printf("enter value of b\n");
	scanf("%d",&b);
	
	printf("enter value of c\n");

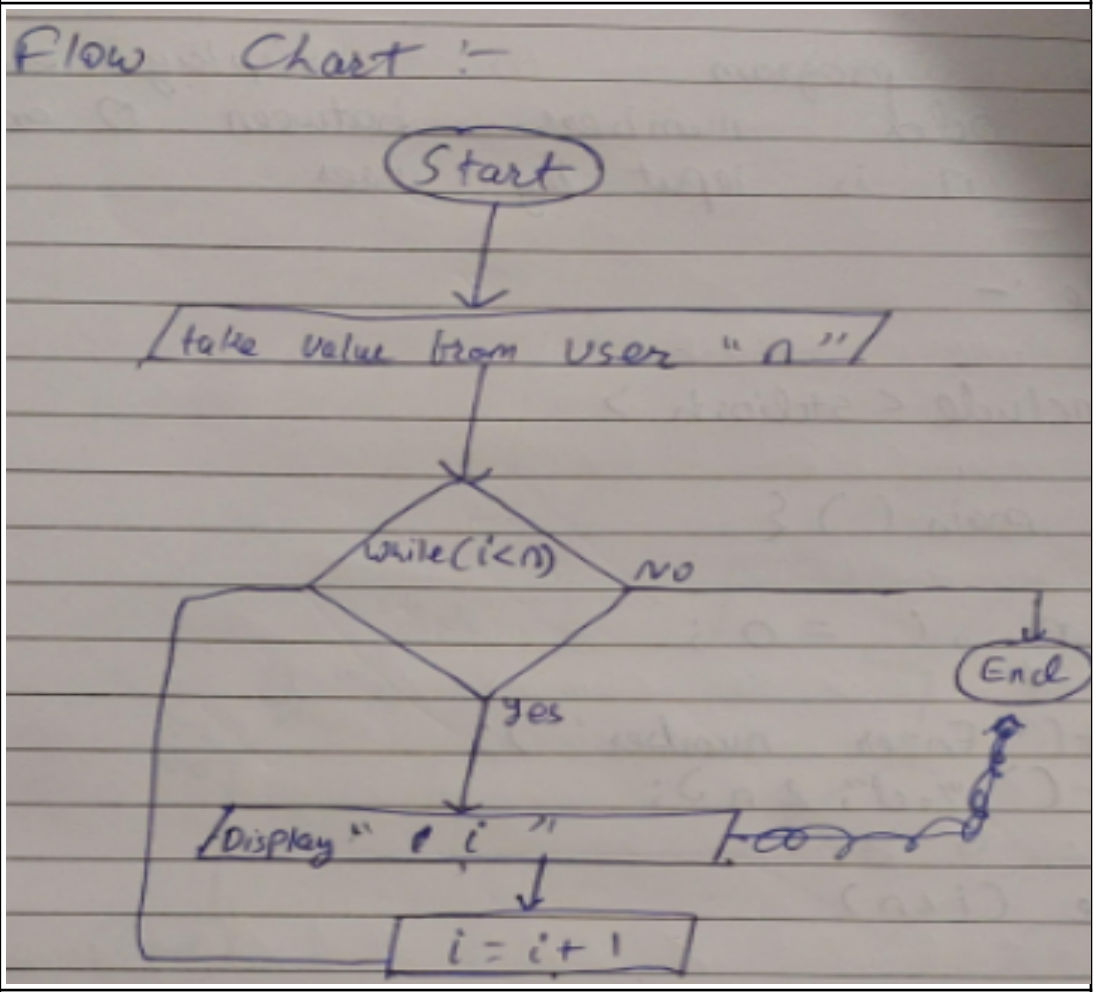
	scanf("%d",&c);
	
	if((a>b) && (a>c))
	{
	printf("a is the largest num\n");
	}
	else if((b>a) && (b>c))
	{
	printf("b is the largest num\n");
	}
	else
	{
	printf("c is the largest num\n");
	}
	printf("code is completed");
	
	}

Output:	enter value of a 16 enter value of b 69 enter value of c 86 c is the largest num code is completed
Your Observation	Here we gave value to three number and check which is greater

Question 4	Write a program to determine if the entered year is a leap year or not.
Flow chart	

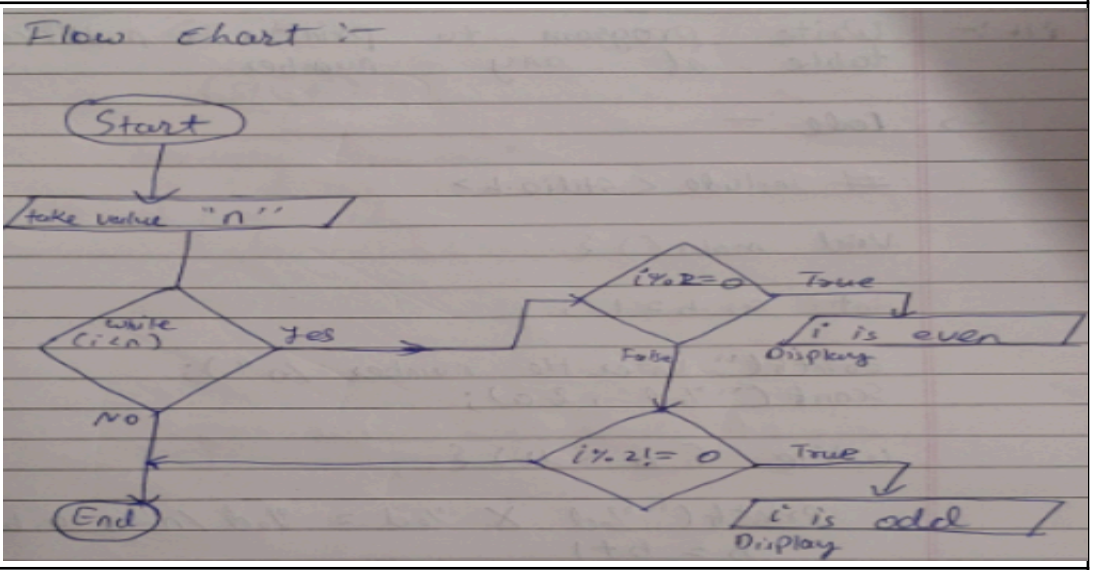
Program or Related Content	#include<stdio.h>
	
	Name: Rajveer Chaudhari
	Roll no.: 202411024
	
	Void main()
	{
	int a;
	printf("enter a year witch you want to chek\n");
	scanf("%d",&a);
	
	if((a%4==0 && a%100 != 0) || a%400==0){
	printf("entered year is leap year");
	}
	else{printf("entered year is not leap year");}
	
	}

Output:	enter a year witch you want to chek 2024 entered year is leap year
Your Observation	Here we gave value to check the entered value is leap year or not We use “AND” and “OR” operator to calculate leap year

Question 5	Write a program to display numbers from 0 to n, where n is input by the user.
Flow chart	

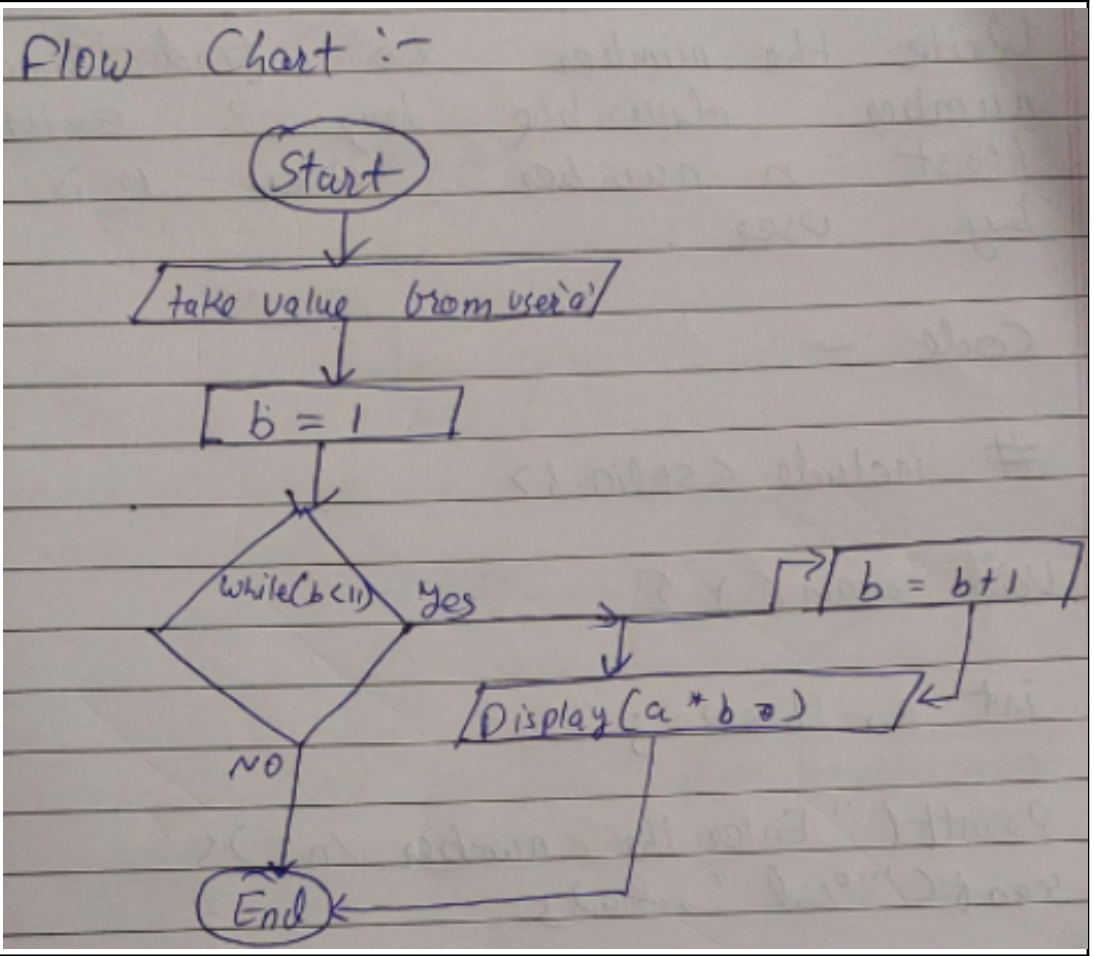
Program or Related Content	#include <stdio.h>
	
	Name: Rajveer Chaudhari
	Roll no.: 202411024
	
	void main(){
	int n, ,i=0;
	printf("Enter Value of n:\n");
	scanf("%d",&n);
	
	while(i<=n){
	printf("%d\t",i);
	i = i+1;
	}
	
	}

Output:	Enter Value of n: 6 0 1 2 3 4 5 6
Your Observation	We use while loop to print the number from 0 to number given by the user

Question 6	Write a program to display even and odd numbers between 0 and n, where n is input by the user.
Flow chart	

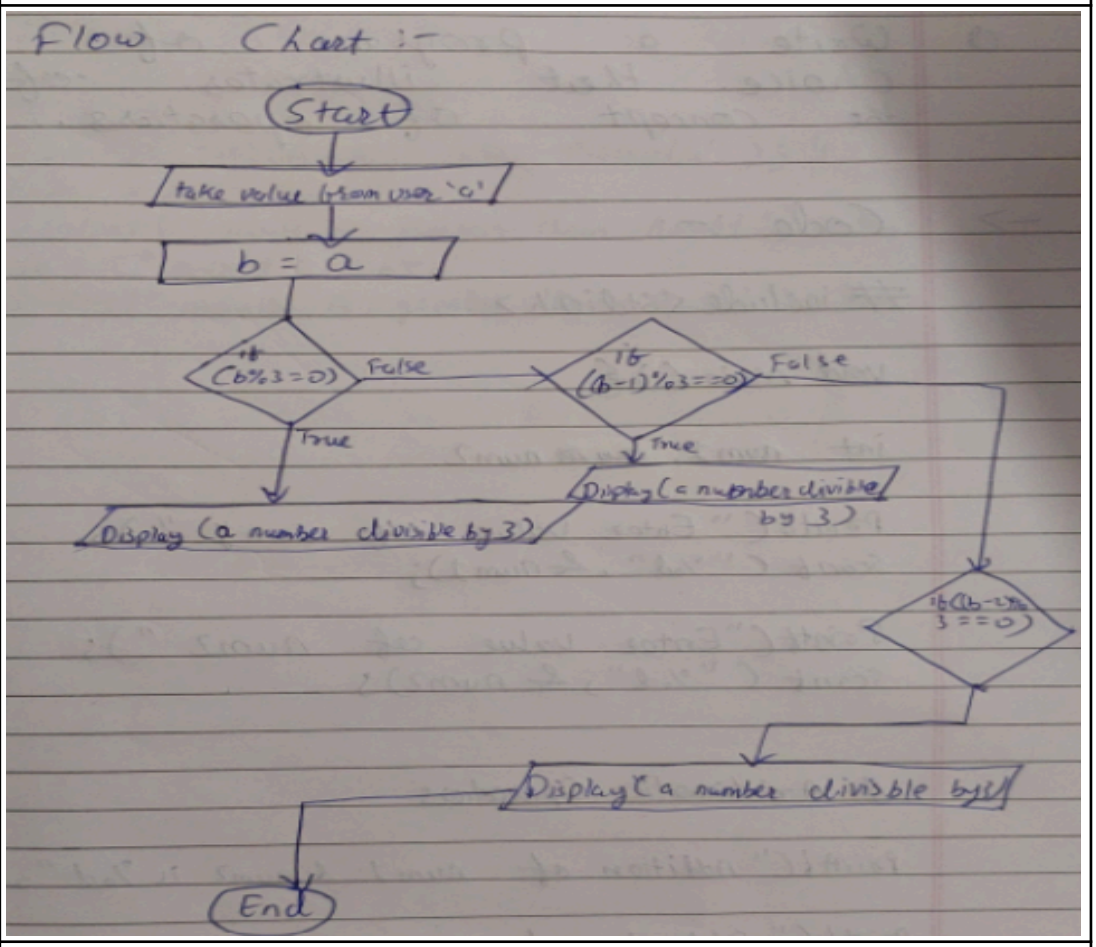
Program or Related Content	#include <stdio.h>
	
	Name: Rajveer Chaudhari
	Roll no.: 202411024
	
	void main(){
	int n,,i=0,o;
	printf("Enter value of n:\n");
	scanf("%d",&n);
	
	while(i<=a){
	if((i%2)==0){
	printf("%d is even ",i);
	i=i+1;
	
	}
	
	}
	
	i=0;
	
	while(i<=a){
	if((i%2)!=0){
	printf("%d is odd ",i);
	i=i+1;
	
	}
	}
	
	}

Output:	Enter Value of N: 6 Even NO: 0, 2, 4, 6 Odd No: 1, 3, 5
Your Observation	We gave the number n and display from 0 to n and print whether the number is odd or even

Question 7	Write a program to print the multiplication table of any number.
Flow chart	

Program or Related Content	#include <stdio.h>
	
	Name: Rajveer Chaudhari
	Roll no.:202411024
	
	void main()
	{
	int a , i=0;
	printf("enter a number to print a multiplicative table\n");
	scanf("%d",&a);
	
	while(i<=10){
	printf("%d X %d =%d\n",a,i,a*i);
	i=i+1;
	}
	}

Output:	enter a number to print a multiplicative table 9 9 X 1 = 9 9 X 2 = 18 9 X 3 = 27 9 X 4 = 36 9 X 5 = 45 9 X 6 = 54 9 X 7 = 63 9 X 8 = 72 9 X 9 = 81 9 X 10 = 90
Your Observation	We gave a number to print a multiplication table of a given number

Question 8	Write a program to find how many numbers divisible by 3 exist in the first n numbers, where n is input by the user.
Flow chart	

Program or Related Content	#include <stdio.h>
	
	Name: Rajveer Chaudhari
	Roll no.: 202411024
	
	void main(){
	int n, a, b=0 , i=0;
	printf("Enter Value of n to check number of multiple from zero to n:\n");
	scanf("%d",&n);
	b =n
	if(b%3==0){
	printf(“number of multiple is %d”, b/3);
	}
	
	if((b-1)%3==0){
	printf(“number of multiple is %d”, (b-1)/3);
	}
	if((b-2)%3==0){
	printf(“number of multiple is %d”, (b-2)/3);
	}
	
	}

Output:	Enter Value of n: 34 Total Numbers which can be divided by 3 is: 11
Your Observation	We take value from user and display the number of multiple of 0 to given number