

Output:-

----- Demonstrate various datatypes -----

Name of student:-

Raj

Address of student:

Mumbai

Roll no of student:

~~80.80~~

Percentage of student: 80.60

Grade of student:

A+

Mobile no:-

7045918929

Student name: Raj

Student Address: Mumbai

Student Roll no: 15

Student Percentage: 80.60

Student Grade: A+

Student Mobile no: 7045918929

Aim :- To study use of different datatype.

Source code :-

```
#include <stdio.h>
#include <conio.h>
void main()
{
    char name[50];
    char add[50];
    int roll no;
    float percent;
    char grade;
    long int mob;
    clrscr();
    printf(" -- Demonstration various datatypes --");
    printf("Name of student\n");
    scanf("%s", &name);
    printf("Address of student\n");
    scanf("%s", &add);
    printf("Roll no of student\n");
    scanf("%d", &roll no);
    printf("Percentage of student\n");
    scanf("%f", &percent);
    printf("Grade of student\n");
    scanf("%s", &grade);
    printf("Mobile no\n");
    scanf("%ld", &mob);
}
```

1

```

printf ("In student name : %s"
printf ("In student address : %s"
printf ("In student roll no : %d"
printf ("In student percent : %.f"
printf ("In student grade : %c"
printf ("In student Mobile no : %d"
getch ();
}

```

Program 2:

Area of Circle:-

Source code:-

```

#
#
void main ()
{
float r;
float pi = 3.14;
float area;
clrscr ();
printf ("Enter radius in");
scanf ("%f", &r);
area = pi * r * r;
printf ("Area : %f", area);
getch ();
}

```

Output :-

4.10.2020

4

from 1.00 to 24.0000

28

Signature

Calculator

Enter 1st no: 2

Enter 2nd no: 2

Addition of numbers: 10

Subtraction of no: 6

Multiplication of no: 16

Division of no: 4

Practical - 2

Aim:- Write C program which will show the use of various different types of operators.

Arithmetic operators

Source code:

```
#include <stdio.h>
#include <conio.h>
void main ()
```

```
{
    int n1, n2, add, sub, mul, div;
    clrscr ();
    printf ("Enter 1st no: ");
    scanf ("%d", &n1);
    printf ("Enter 2nd no: ");
    scanf ("%d", &n2);
    add = n1 + n2;
    printf ("Addition of numbers: %d\n", add);
    sub = n1 - n2;
    printf ("Subtraction of no: %d\n", sub);
    mul = n1 * n2;
    printf ("Multiplication of no: %d\n", mul);
    div = n1 / n2;
    printf ("Division of no: %d\n", div);
}
```

2. Logical operators

```

#include <stdio.h>
#include <conio.h>
void main()
{
    int x, y, z, u1, u2, u3, u4, u5;
    clrscr();
    printf("Enter 1st no:");
    scanf("%d", &x);
    printf("Enter 2nd no:");
    scanf("%d", &y);
    printf("Enter 3rd no:");
    scanf("%d", &z);
    u1 = (x = y) & & (z > y);
    printf("value 1 is: %d\n", u1);
    u2 = (x = y) & & (z < y);
    printf("value 3 is: %d\n", u3);
    u4 = 1(x == y);
    printf("value 4 is: %d\n", u4);
    u5 = 0(x == y);
    printf("value 5 is: %d\n", u5);
    getch();
}

```

Output

Enter

Enter

Enter

Value

Value

Value

Value

Value

Output:

30

enter 1st no: 9

enter 2nd no: 8

enter 3rd no: 2

Value 1 is: 0

Value 2: 1

~~Value 3 is: 1~~

Value 4 is: 0

Value 5 is: 1

Sm!
17/01/2020

Practical- 3

Aim:- Programs on decision statements.

1) WAP to find whether entered year is leap year or not

Algorithm:-

S-1:- Take integer variable year.

S-2:- Using user input take the value.

S-3:- Using nested if else conditions, if the value is true, print it is a leap year or print it is not a leap year.

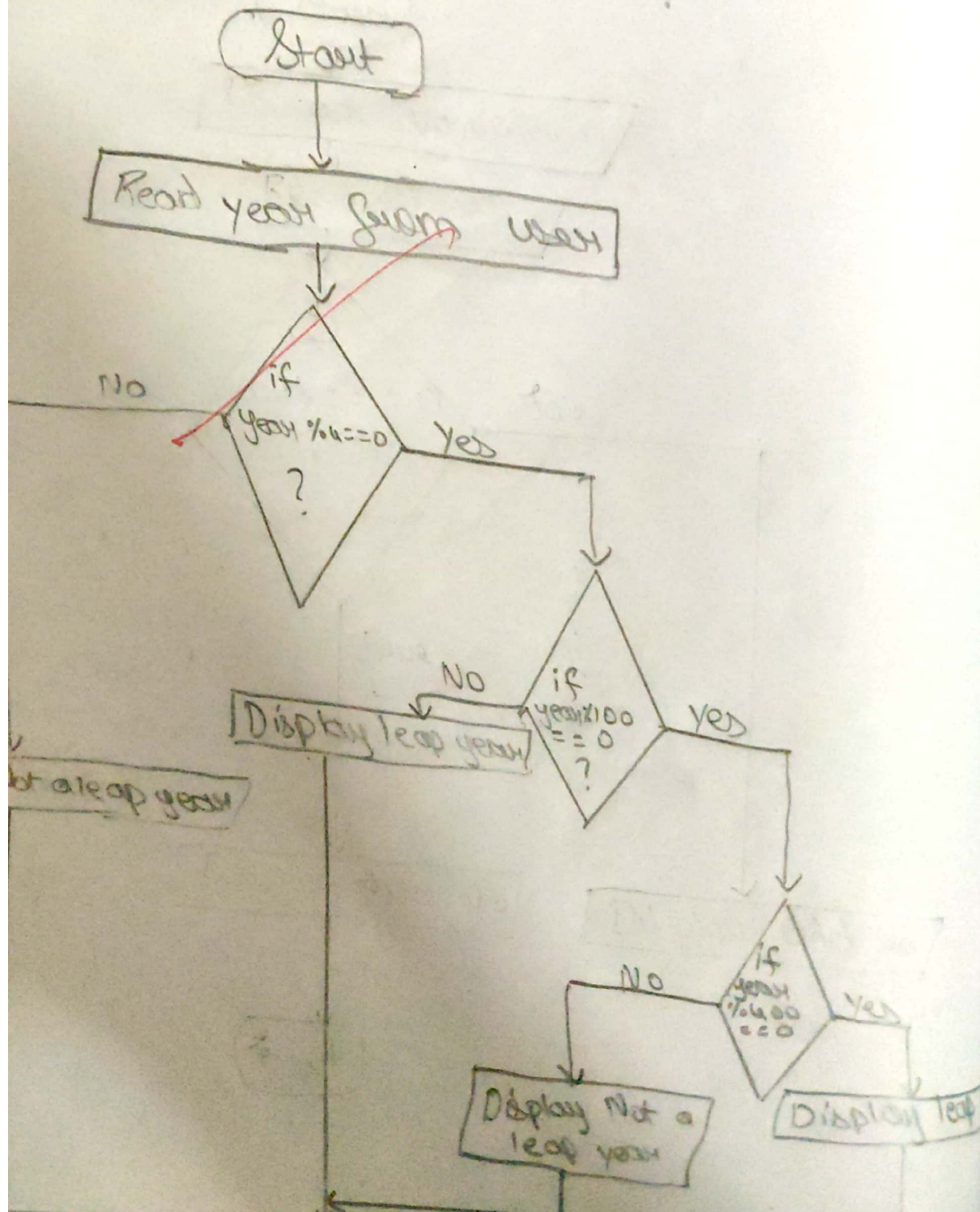
Source code:-

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int year;
    clrscr();
    printf("Enter year:");
    scanf("%d", &year);
    if (year % 4 == 0);
    {
```

for year: 1900
 00 is not a leap year

for year: 2012
 12 is a leap year.

out:-



```
if (year % 100 == 0)
```

```
{  
    if (year % 400 == 0)
```

```
        printf("%d is a leap year", year);
```

```
    else
```

```
        printf("%d is not a leap year", year);
```

```
    }
```

```
    else
```

```
        printf("%d is a leap year", year);
```

```
}
```

```
else
```

```
    printf("%d is not a leap year", year);
```

```
    return 0;
```

```
}
```

2) WAP to find odd and even number.

Algorithm:-

S-1:- Take integer variable number.

S-2:- using user input, take the value. Flow c

S-3:- Use Conditional Statement:
if ($\text{num} \% 2 == 0$) print even,
else print odd.

S-4:- Print the result.

Source Code:-

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int num;
    printf("Enter the number:");
    scanf("%d", &num);
    if (num % 2 == 0)
        printf("%d is an even number", num);
    else
        printf("%d is an odd number", num);
    getch();
}
```

Output:-

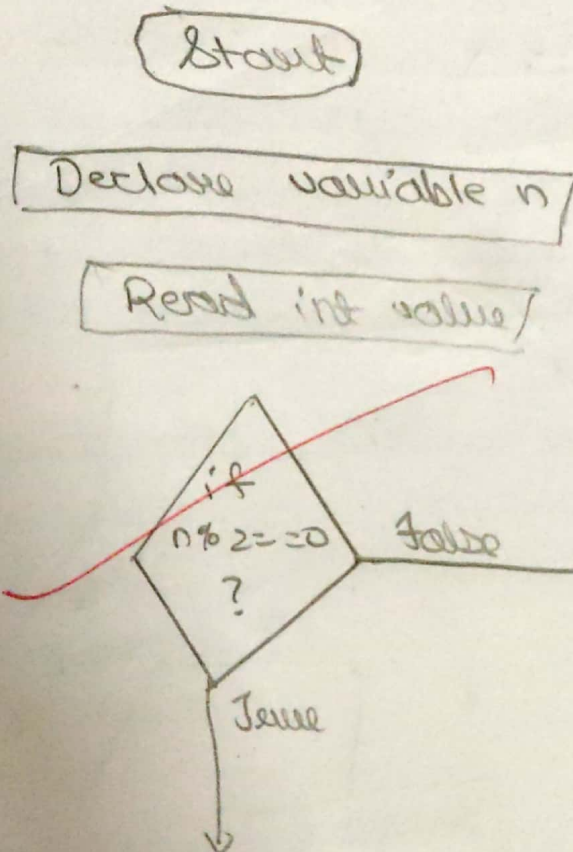
enter the number :- -7

-7 is an odd number.

enter the number :- 22

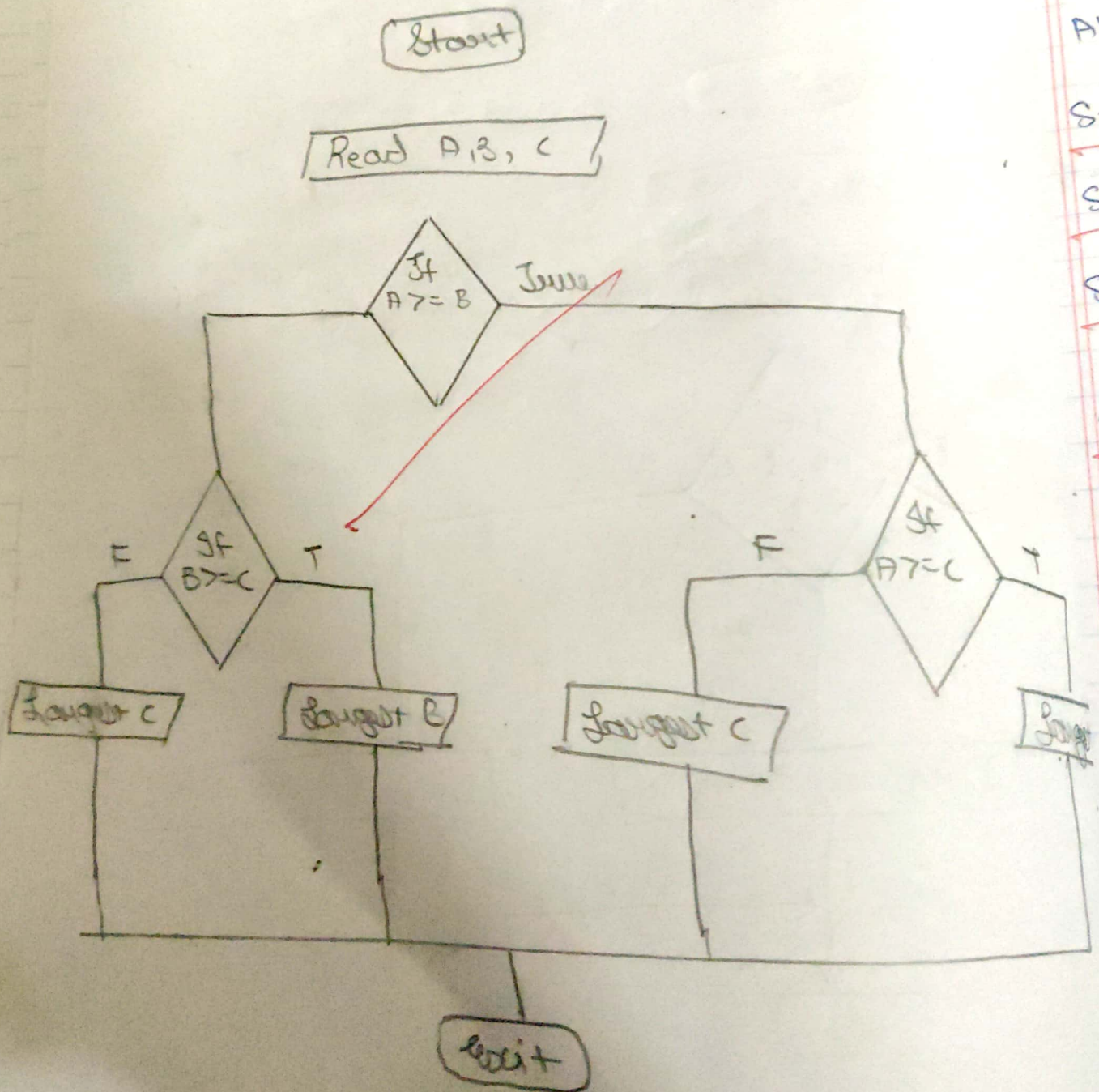
22 is an even number.

Flowchart:-



Output:-
Enter the numbers :- 2, 2, 7
7 is the largest number.

Flow chart:-



* WAP to find largest of three numbers using nested if... else.
Algorithm.

S-1:- Take the three variables A, B, C.

S-2:- Using user input, take the values.

S-3:- Using nested if else statement determine which number is greater.

S-4:- print the largest number.

Source code:-

```
#include <stdio.h>
#include <conio.h>
int main()
{
```

```
    int A, B, C;
    printf("Enter three numbers");
    scanf("%d %d %d", &A, &B, &C);
    if (A >= B)
    {
```

```
        if (A >= C)
            printf("%d is the largest number", A);
        else
            printf("%d is the largest number", C);
    }
```

else

{

if (B >= C)

printf("%d is the longest number", B);

else

printf("%d is the longest number", C);

}

return 0;

}

Am: 24/01/2020