

SUMMER EXAMINATION 2020

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SECTION#	B
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PAPER	PROGRAMMING FUNDAMENTAL
C.SEMESTER	4 TH
DATE	25/08/2020

INSTRUCTOR

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Question#1

Q) Draw the Flow chart to get two integer items from Keyboard and Display to the Screen Sum, Difference and product?

ANSWER

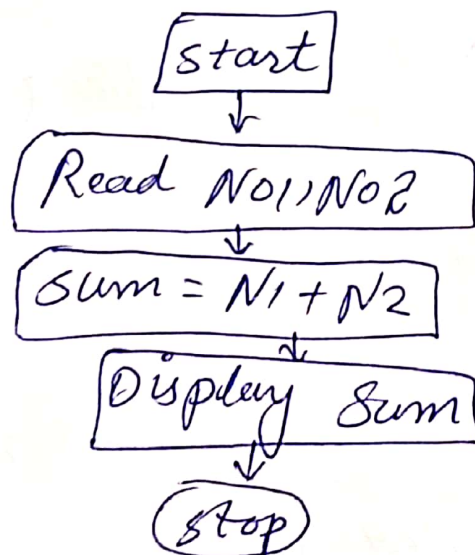
→ Sum of Two Numbers :

input = No1, No2

process = Add No1, No2

out put = Display Sum

→ Flow chart



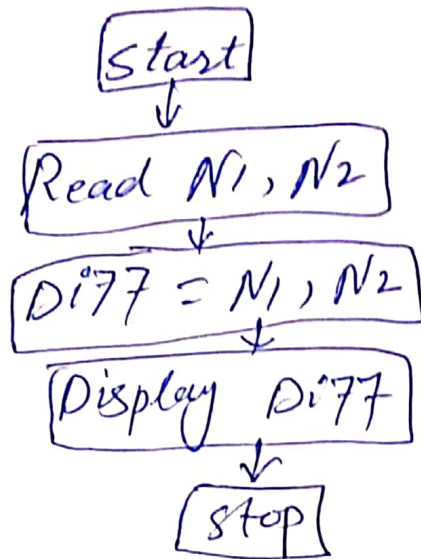
→ Difference of two Numbers :

input = No1, No2

process = Subtract No1, No2

output = Display Difference

ID# 14822 → Flow chart



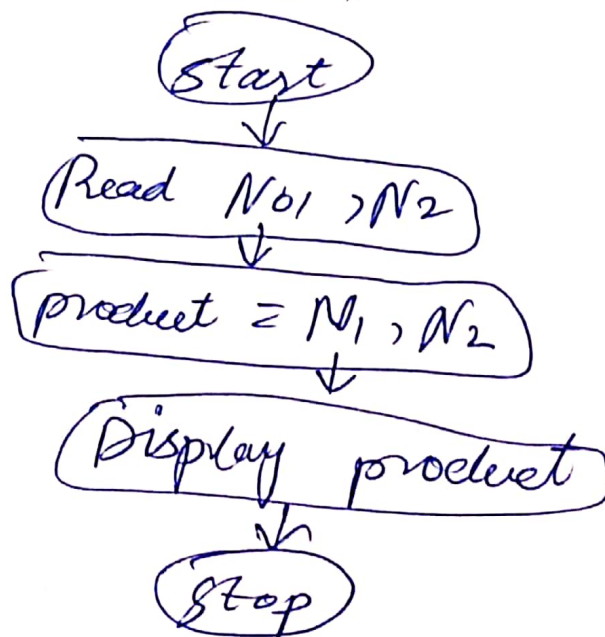
→ product of two numbers.

input = N₁, N₂

process = Multiply N₁, N₂

output = Display product.

→ Flow chart



```
Sum :- main() {  
    int a;  
    int b;  
    int c;
```

```
    a = 100;
```

```
    b = 20;
```

```
    c = a + b;
```

```
    cout << "The Sum is " + c;  
}
```

→ Difference :-

```
main() {  
    int a;  
    int b;  
    int x;
```

```
    a = 10;
```

```
    b = 20;
```

```
    x = a - b;
```

```
    cout << "The Difference is " + x;  
}
```

→ product:-

```
#include <iostream>
```

```
using namespace std;
```

```
main() {
```

```
    int a;
```

```
    int b;
```

```
    int y;
```

```
    a = 8
```

```
    b = 4
```

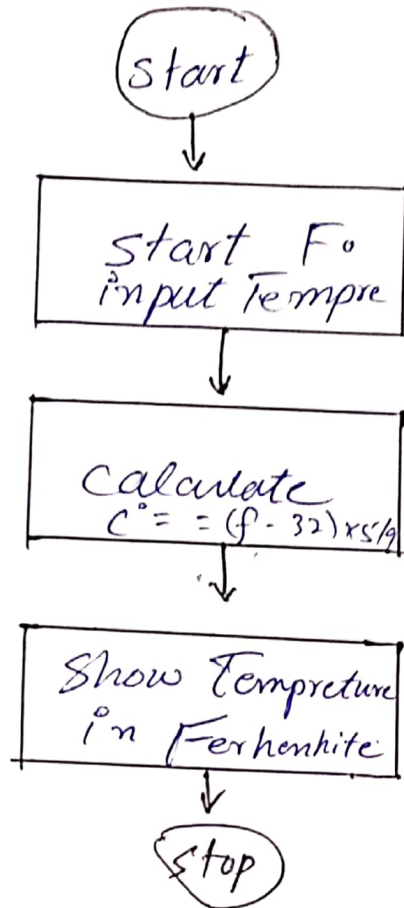
```
    y = a * b;
```

```
    cout << "The product is " << y;
```

Q6

b)

Draw the Flow chart:-



→ program:-

```
#include <iostream>
using namespace std;
main() { float cell;
char Temperture;
cout << "Enter Temp";
Cin >> Temperture;
cell = (f-32) / 1.8;
cout << "Temp in Feh" << cell;
```

Date:

Day:

Question # 2

a) Draw the flow chart and write a C++ program to find the area and perimeter of a Rectangle using the below formulas.

Area of Rectangle
↓
Height × Width

ANSWER

```
#include <iostream>
```

```
using namespace std;
```

```
main() {
```

```
    float length, width;
```

```
    float Area;
```

```
    cout << "Enter length and  
    width of T";
```

Cin >> length;

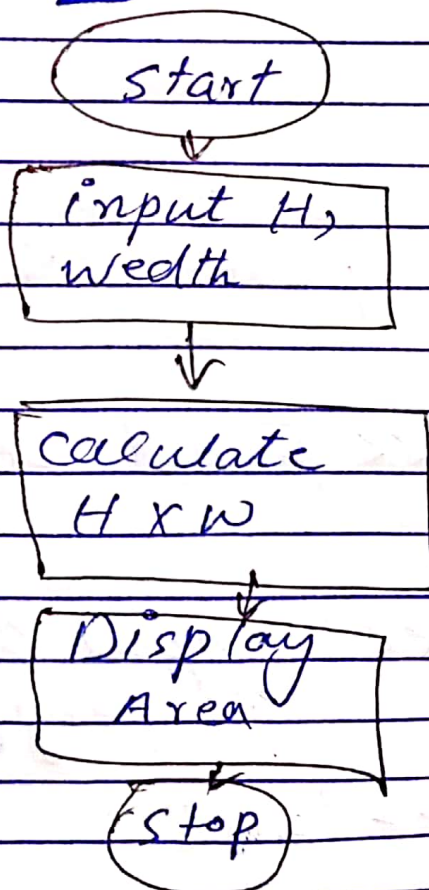
Cin >> wedth;

Area = length * wedth;

cout << "Area = " << Area;

Return 0;

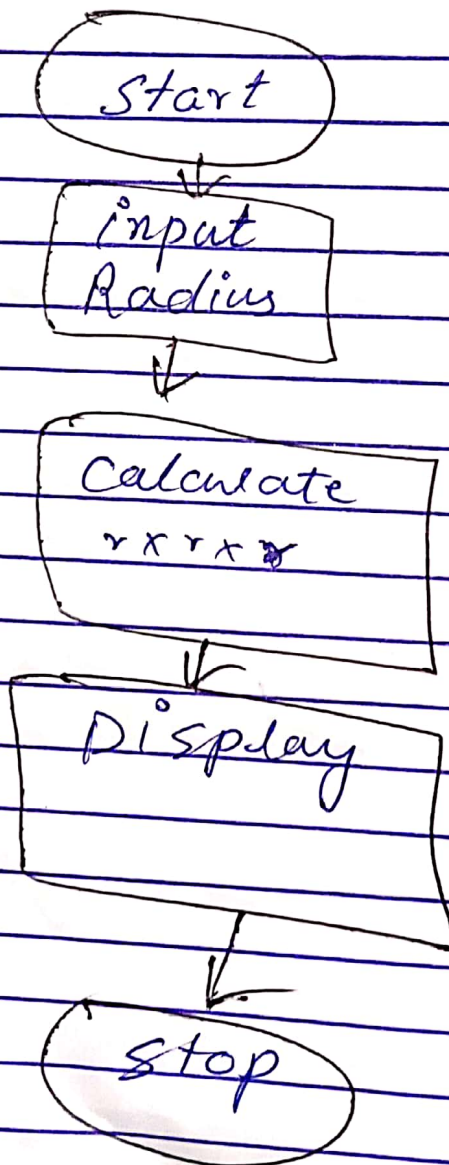
→ Flow chart:-



b) Draw the Flow chart and write c++ program to obtain the Radius of a circle....?

ANSWER

→ Flow chart :-



Date:

Day:

→ program:-

```
#include <iostream>
```

```
using namespace std;
```

```
main() {
```

```
    float r, Area, Circum;
```

```
    cout << "Enter Radius of  
the circle";
```

```
    cin >> r;
```

```
    Area = 3.14 * r * r;
```

```
    cout << "Area of the  
circle = " << Area;
```

```
}
```

Question #3

a) Discuss different types of programming languages?

ANSWER

↳ There are numerous programming languages are becoming more general and all-purpose. But these languages have their specificities, and each language has its own advantages and disadvantages.

programming languages can be classified into a few types, However, these languages support multiple program style.

Every year there are a number of programming languages are implemented but few languages are becoming very

popular which may be used by a professional programmer in their career.

Types of programming languages:-

1) procedural p. language:

↳ is used to execute a sequence of statements which lead to a result.

this type of programming languages uses multiple variables etc.

2) Functional programming language:

↳ Functional programming language typically uses stored data, frequently avoiding loops in recursive function.

this functional programs primary focus is on the Return values of Functions and side effects and different Suggest that storing state are powerfully discouraged.

3) object oriented program

↳ This programming language views the world as a group of object that have internal data and External accessing parts of that data.

the aims this programming languages is to think about the fault by separating it into a Collection of objects that offer services which can used to solve program.

4) Scripting language :

↳ These programming language are often procedural and may comprise object-oriented programming language elements.

5) Logic programming :

↳ These types of languages let programmer make declarative statements and then allow the machine to Reason about the consequence.

6) C++ :

↳ The C++ language has an object oriented structure which used in large projects. programmer can collaborate program into other parts.

7) C language.

↳ The C language is a Basic programming language and it is a very popular language, particularly used in game programming.

~~pascal, Fortran.~~

b) \rightarrow How many translators are there to translate Higher level language to Machine language? Discuss.

ANSWER

\rightarrow Computer only understand machine code (Binary), this is in issue because programmers refer to use a variety of high and low level programming language instead.

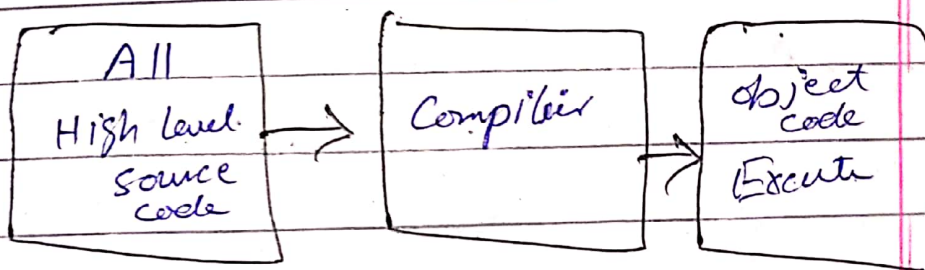
To get around the issue because programme code (source code) needs to pass through a translator.

\rightarrow A Translator will convert the source code into machine code (object code).

→ There are several types of translators:-

→ Compiler:-

↳ Compiler are used to Translate a written a High-level language to machine code (object code).

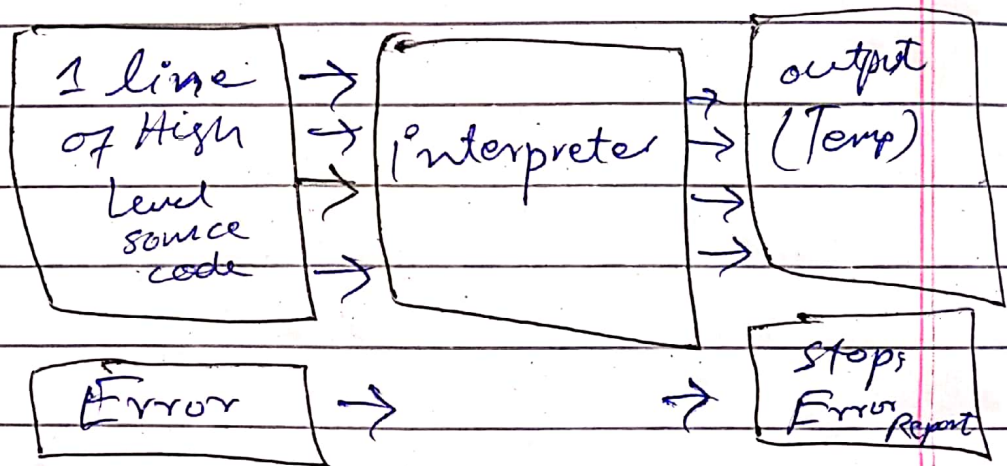


→ once compiled (all in one go), the translated program file can then be directly used by the Computer and independently Executable.

→ Compiling may take some time.

→ Interpreter:

↳ interpreter programs are able to read, translate and execute one statement at a time from a high level language program.



→ interpreter programs are able to read, translate and execute one statement.

→ The interpreter stops when a line of code is reached that contains an error.

→ Interpreter are often used during the development of a program. They make debugging easier as each line of code is analysed and checked before Execution.

✓ — ✓ — ✓