**Project :**

AVENTURA - Compiler and Language.

**INTRODUCTION:**

Team aventura has made its own compiler with its own Language, in which the user is provided with a GUI(graphical user interface ) to work with. Aventura Compiler is basically a compiler which work on Turbo C++, as user follows syntax of Aventura and compiles it ,it will automatically save code into extension \*.AVT and Aventura compiler converts it into C++ syntax and saves it into \*.CPP.

**SYNTEX:**

Aventura Syntax.

|  |  |
| --- | --- |
| * + - **HEADER FIles** | * **conio.h** * **iostream.h** * **mathasvt.h** |
| * + - **TERMINATOR** | **/**is the line terminator in Aventura language. |
| * + - **DATA TYPES** | * inte (integer) * fl(floating point) * ch(char) |
| * + - **KEYWORDS** | * out * in |
| * + - **BUILT IN FUNTIONS** | * cls * Hold * Add * Sub * Mul * Div * Sqr * Cube |

**Tutorial:**

|  |  |
| --- | --- |
| How To Initialize Header File? | **#include<***HEADER\_FILE\_NAME***>**  Example:  #include<mathsavt.h> |
| How To Declare Data Type? | For Integer,  **inte n/**  for floating point,  **fl n/**  for character ,  **ch n/** |
| How To Initialize Value? | At the time of declaration,  EXAMPLE:  **Inte a=2/** |
| How To Clear The Screen? | **cls/** |
| How To Print Line On A Screen? | **out: (“***TYPE YOUR TEXT HERE***”)/**  EXAMPLE:  **out: (“HELLO WORLD”)/** |
| How To Take Input On The Screen? | **in: (***variable***)/**  EXAMPLE:  **in: (n)/** |
| How To Hold Display On Screen?  How To Print Value of Variable Only? | **hold/**  **value:(***variable***)/**  EXAMPLE:  **value:(a)/** |

**EXAMPLE PROGRAM** “*HELLO WORLD”*

*#include<conio.h>*

*#include<iostream.h>*

*#include<mathsavt.h>*

*void main()*

*cls/*

*out(“hello world”)/*

*hold/*

**LIMITATIONS:**

* User cannot declare more than 1 variable in the same line.
* Initialization will be done at the time of declaration.
* User can not display more than 4 characters in a single **out:** statement.
* User cannot directly divide two numbers with ‘/’ ; for this aventura has a built in function.
* User cannot declare the name of variable with more than 2 characters.
* Variable name should contain letters at first place.

**FUTURE EXTENSIONS:**

* To overcome the limitations of our language.
* To Enhannce the GUI.
* To add more built in function.
* To add user define functions.