# RAPTOR

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## 1 Introduction

RAPTOR is a flowchart based programming environment. Flow charts are the pictorial representation of a task that shows the breakdown of a given task into steps.It helps in writing programs that can be easily visualised and debugged. RAPTOR is a good tool to introduce programming concepts to beginners. It also can be used to visualize algorithms making its translation to other languages easier.

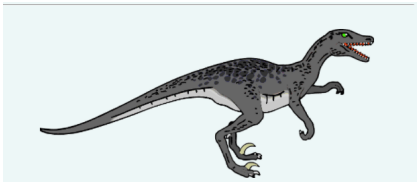
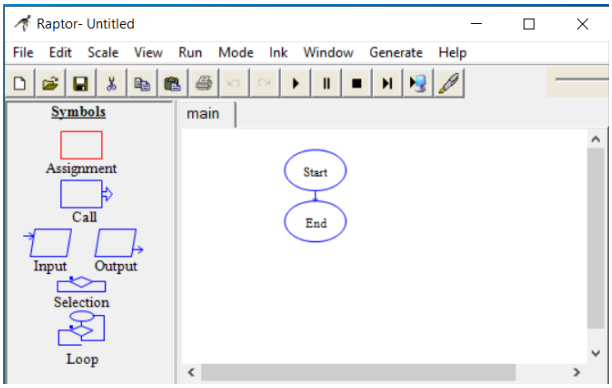


Figure 1: RAPTOR LOGO

## 2 opening window

On opening the RAPTOR application two windows will open. In this window we perform all the operations.Also a MasterConsole will open that will show the end output. The main window has panels for selecting various symbols,editing them and also to run the program.



the upper panel will contain various symbols that would determine the execution of the program. the triangle button will be used to run the program

# 3 basics

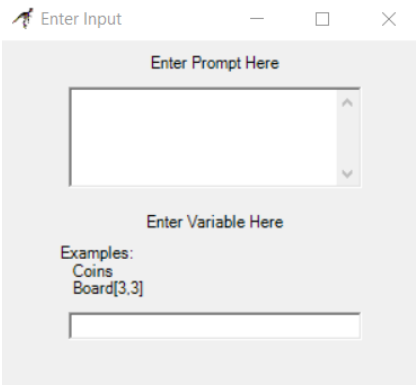
A computer function does the following 3 basic tasks

- Input - depicted using a paralellogram
- Processing - includes various calculations,conditions and loop
- Output - gives us the end result of the processing.

In raptor instead of conventional keyword usually used in the programming languages, we use various symbols to show the processes and algorithms. they are as shown below:

- start and end :These parts are shown by an oval shape. They show the start and endpoint of the code
- connections : The connections between various programs are shown by an arrow.
- input and output:Parallelograms shows inputs and outputs. input and output diagrams have different arrows
- selection: it is used give conditions and choose different paths based on an Boolean output
- Loop: here the program iterates based on the input. we can give the loop exiting conditions here.

On double clicking a function, we move in to a window where we can add messages and declare functions for the document.



# 4 Sample program

The above program is a simple program done using RAPTOR to find which number is greater among the two inputted numbers. Here in the side bar we can see the value of the variable that have been declared and how they change. After inputting two numbers(A and B), it checks whether A is greater than B or not and based on the true or false answer from that part an output is generated. The end results will be displayed in the master console.