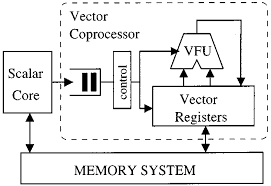
**Vector Processing:**

Vector processing is the processing of large data of large one-dimentional arrays called vectors using special processor and instruction set which can handle processing such data simultaneouly instead of one per cycle.the most common example of vector processing is training a mathematical model for prediction porposes.It mainly impliments [single instruction, multiple data](https://en.wikipedia.org/wiki/Single_instruction,_multiple_data) (SIMD) processing of data. The architecture of a vector processor is as follows:

[](https://www.google.com/imgres?imgurl=https%3A%2F%2Fwww.researchgate.net%2Fpublication%2F2985917%2Ffigure%2Ffig10%2FAS%3A668312103034904%401536349430852%2FSimplified-view-of-a-vector-processor-with-one-functional-unit-for-arithmetic-operations.pbm&tbnid=6XFGjjY_VF3MnM&vet=12ahUKEwjy2vfJ-5WAAxXSq2MGHVpVCU8QMygDegUIARDsAQ..i&imgrefurl=https%3A%2F%2Fwww.researchgate.net%2Ffigure%2FSimplified-view-of-a-vector-processor-with-one-functional-unit-for-arithmetic-operations_fig10_2985917&docid=T_3QnHoc7joKRM&w=693&h=475&q=vector%20processing&client=firefox-b-d&ved=2ahUKEwjy2vfJ-5WAAxXSq2MGHVpVCU8QMygDegUIARDsAQ)

The applications of vector processing are:

1. Image Processing
2. Artificial Intelligence
3. Human Genome Mapping
4. Simulations
5. Weather Predictions

**Array Processing:**

Arrayprocessing is a wide area of research in the field of data [processing](https://en.wikipedia.org/wiki/Signal_processing) that extends from the simplest form of 1 dimensional line arrays to 2 and 3 dimensional array geometries. The most common example of array processing is graphics processing that occurs in a graphics card of a computer.A GPU processes the 2D array of values of a picture called a raster and displays it on the screen.The architecture of a array processor is as follows:

