First freeze grain

- Larger amount & weakly
- Weak freeze

\[ \frac{1}{10} \times \left[ \begin{array}{c} \text{Lms} \\ \text{Lms} \end{array} \right] \]

\[ \text{Overhead Lms} \]
Typo of Operating System

Shared memory (sym. multiproc)
Kernel for Shangrila

- preemptible
- roundrobin
- priority

Queue

- High Priority
- Ready

To run on CPU

Process
null
Successful OS for SCC

- 40 proc
- 40 copies of Linux
- 2D

[2 copies share via some
critical data in coherent mem]
Can

Continue

Move window

Correct

30°

Large # of CPE on a cheap

I put a Xen Phi.
Hierarchical Structure

Management

My Crew

Sub-Groups

- Sub-Group 1
- Sub-Group 2
- Sub-Group 3
Hybrid

D.S.M.

hierarchy
Loyalty - Covenancy, pre-sec.

Cluster --- Direct mem.

Others

Languages --- Concurrent, pre-sec.

Shared mem.
with parallelism

C, C++ and managed

Open MP

higher level, shared memory
# Genesis

"In the beginning...

# Code

```c
#include<stdio.h>

int main()
{
    int i;
    for (i = 1; i <= 3; i++)
        printf("%d
", i);
    return 0;
}
```

# Python

```python
i = 1
while i <= 3:
    print(i)
    i += 1
```

3 Levels 2

# C++

```cpp
#include<iostream>

int main()
{
    for (int i = 1; i <= 3; i++)
        std::cout << i << std::endl;
    return 0;
}
```

# Programming Camp for Sharing

- i
- for construct
- printf
- C++
# Run the for loop sequentially without running the code index:

```python
for i in range(n):
    # code
```

5
Cluster Computing

- Master-worker

Communication

General
Get results from worker

Send data & instructions to worker

Send code to worker

Loop

Worker

Results

Save code

Must fix me
Linda is most suave

MPM = PDP

PM = obscure