
MES Wadia College of Engineering Pune-01**Department of Computer Engineering**

Name of Student:	Class:
Semester/Year:	Roll No:
Date of Performance:	Date of Submission:
Examined By:	Experiment No: Group B-06

Group B ASSIGNMENT NO: 06

AIM: Write a Java/C++ program to simulate memory placement strategies

1. First Fit
2. Best Fit
3. Worst Fit
4. Next Fit

OBJECTIVES:

- 1. To acquire knowledge memory placement strategies
- 2. To be able to implement memory placement strategies

PRE-REQUISITES:

1. basic of memory management

APPARATUS:**THEORY:**

These are **Contiguous** memory allocation techniques.

First Fit

In the first fit approach is to allocate the first free partition or hole large enough which can accommodate the process. It finishes after finding the first suitable free partition.

Best Fit

The best fit deals with allocating the smallest free partition which meets the requirement of the requesting process. This algorithm first searches the entire list of free partitions and considers the smallest hole that is adequate. It then tries to find a hole which is close to actual process size needed.

Worst fit

In worst fit approach is to locate largest available free portion so that the portion left will be big enough to be useful. It is the reverse of best fit

Next fit

Next fit is a modified version of first fit. It begins as first fit to find a free partition. When called next time it starts searching from where it left off, not from the beginning.

e.g

In first fit, the partition is allocated which is first sufficient from the top of Main Memory.

Example :

```
Input : blockSize[] = {100, 500, 200, 300, 600};  
        processSize[] = {212, 417, 112, 426};
```

Output :

Process No.	Process Size	Block no.
1	212	2
2	417	5
3	112	2
4	426	Not Allocated

Same way generate o/p for other algorithms.

CONCLUSION:**QUESTIONS:**

1. What is the problem with best fit memory allocation?
2. What is worst fit in memory management?
3. What is the Next fit memory allocation strategy?