

Assignment 3

Q- Apply the PERT-CPM method for a given problem(task-pair and 3 types of time are given)

Ans.

```
#include<stdio.h>
#include<string.h>
```

```
struct Task {
    char name[50];
    int optimisticTime;
    int expectedTime;
    int pessimisticTime;
};
```

```
int calculatePERT(int optimisticTime, int expectedTime, int pessimisticTime) {
    return (optimisticTime + 4 * expectedTime + pessimisticTime) / 6;
}
```

```
int main() {
    struct Task tasks[3] = {
        {"Task1", 2, 4, 6},
        {"Task2", 3, 5, 7},
        {"Task3", 4, 6, 8}
    };

    for (int i = 0; i < 3; i++) {
        int pert = calculatePERT(tasks[i].optimisticTime, tasks[i].expectedTime,
tasks[i].pessimisticTime);
        printf("%s - PERT: %d\n", tasks[i].name, pert);
    }

    return 0;
}
```

OUTPUT

Output

```
/tmp/fLQiM0iQYe.o
```

```
Task1 - PERT: 4
```

```
Task2 - PERT: 5
```

```
Task3 - PERT: 6
```