

**3. Write a OpenMP program to calculate n Fibonacci numbers using tasks.**

```
#include <stdio.h>

#include <omp.h>

int fib(int n) {
    if (n < 2) return n;

    int x, y;

    #pragma omp task shared(x) if(n > 10)
    x = fib(n - 1);

    #pragma omp task shared(y) if(n > 10)
    y = fib(n - 2);

    #pragma omp taskwait

    return x + y;
}

int main() {
    int n;

    printf("Enter how many Fibonacci numbers to print: ");
    scanf("%d", &n);

    #pragma omp parallel
    {
        #pragma omp single
        {
```

```
for (int i = 0; i < n; i++) {  
    int result = fib(i);  
    printf("fib(%d) = %d\n", i, result);  
}  
  
}  
  
}  
  
return 0;  
  
}
```