DYNAMIC PROGRAMMING

#include <conio.h>

#include <iostream.h>

#define ll long long

int result[1000] = {0};

ll fact\_dp(int n)

{

if (n >= 0)

{

result[0] = 1;

for (int i = 1; i <= n; ++i)

{

result[i] = i \* result[i - 1];

}

}

return result[n];

}

void main()

{

clrscr();

int n;

gotoxy(28,2);

cout<<"Dynamic programming(factorial)\n\n";

while (1)

{

cout<<"Enter interger to compute factorial(0 to exit): ";

cin>>n;

if (n == 0)

break;

cout<<"Factorial of "<<n<<" is : ";

cout<<fact\_dp(n)<<endl;

}

getch();

}