

Q. 4)

```
#include <bits/stdc++.h>
```

```
using namespace std;
```

```
int main()
```

```
{  
    int n; cin >> n;
```

```
    int x[n+1];
```

```
    for (int i=1; i<=n; i++) x[i] = i;
```

```
    while(1){
```

```
        for (int i=1; i<=n; i++) cout << x[i]; cout << " ";
```

```
        int i = n-1, k = n;
```

```
        while (x[i] > x[i+1] && i > 0) i--;
```

```
        if (i == 0) break;
```

```
        while (x[k] < x[i]) k--;
```

```
        swap(x[k], x[i]);
```

```
        reverse(x+i+1, x+n+1);
```

```
    }
```

```
    return 0;
```

Đề 2) 4) #include <bits/stdc++.h>

using namespace std;

int x[100], n, k;

void out()

for (int i = 1; i <= n; i++) cout << x[i]; cout << " ";

}

void Try (int i)

for (int j = x[i-1] + 1; j <= n - k + i; j++)

x[i] = j;

if (i == k) ~~break~~ out();

else Try (i + 1)

}

}

int main()

cin >> n >> k;

x[0] = 0;

Try (1);

return 0;

}

Đề 3) 4) #include <bits/stdc++.h>

using namespace std;

int main()

int n, k; cin >> n >> k;

int x[k+1];

for (int i = 1; i <= k; i++) x[i] = i;

while(1)

for (int i = 1; i <= k; i++) cout << x[i]; cout << " ";

int i = k;

while (x[i] == n - k + i && i > 0) i--;

if (i == 0) break;

x[i]++;

for (int j = i + 1; j <= k; j++) x[j] = x[i] + j - i;

}}

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Đề 4) 4)

```
#include <iostream>
using namespace std;
int x[100], n, check[100] = {0};
void out() {
    for (int i = 1; i <= n; i++) cout << x[i]; cout << " ";
}
void Try(int i) {
    for (int j = 1; j <= n; j++) {
        if (check[j] == 0) {
            x[i] = j;
            check[j] = 1;
            if (i == n) out();
            else Try(i + 1);
            check[j] = 0;
        }
    }
}
int main() {
    cin >> n;
    Try(1);
    return 0;
}
```



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Đề 5) 4a)

```
#include <bits/stdc++.h>
```

```
using namespace std;
```

```
int x[100], n;
```

```
void out() {
```

```
    for (int i = 1; i <= n; i++) cout << x[i], cout << " ";
```

```
}
```

```
void Try(int i) {
```

```
    for (int j = 0; j <= 1; j++) {
```

```
        x[i] = j;
```

```
        if (i == n) out();
```

```
        else Try(i + 1);
```

```
    }
```

```
}
```

```
int main() {
```

```
    cin >> n;
```

```
    Try(1);
```

```
    return 0;
```

```
}
```

4b) Giống đề 3.

Đề 6) 4a) Giống đề 4.

Đề 6) 4b) Giống đề 3.