```
#include<iostream>
using namespace std;
void arranjo(int n, int r, int x[], bool used[], int k){
   int i;
   if (k == r){
      for (i = 0; i < r; i++)
         cout<<x[i]+1<<" ";
      cout<<endl;
   } else {
      for (i = 0; i < n; i++) {
         if (!used[i]) {
            used[i] = true;
            x[k] = i;
            arranjo(n, r, x, used, k+1);
            used[i] = false;
         }
      }
   }
}
int main () {
   int i, n, r, x[100];
   bool used[100];
   cout<<"Entre com o valor de n: ";
   cin>>n;
   cout<<"Entre com o valor de r: ";
   cin>>r;
   for (i = 0; i < n; i++)
      used[i] = false;
   arranjo(n,r,x,used,0);
   return 0;
}
```

$A_2^3 =$ 1 2
1 3
2 1
2 3
3 1
3 2

$\frac{3!}{1!} = \frac{3 \times 2!}{1!} = 6$