**Pass: excel**

**Bài 1. Đặt cờ hiệu**

|  |
| --- |
| #include <bits/stdc++.h>  using namespace std;  using ll = long long;  int main(){  #ifndef ONLINE\_JUDGE  freopen("input.txt", "r", stdin);  freopen("output.txt", "w", stdout);  #endif  int a, b; cin >> a >> b;  bool flag = false;  for(int i = min(a, b); i <= max(a, b); i++){  if(i % 2 == 0 || i % 3 == 0 || i % 5 == 0){  cout << i << " ";  flag = true;  }  }  if(flag == false){  cout << "28tech\n";  }  } |

**Bài 2. Số toàn chẵn**

|  |
| --- |
| #include <bits/stdc++.h>  using namespace std;  using ll = long long;  int main(){  #ifndef ONLINE\_JUDGE  freopen("input.txt", "r", stdin);  freopen("output.txt", "w", stdout);  #endif  long long n;  cin >> n;  bool check = true;  while(n != 0){  int r = n % 10;  if(r % 2 == 1){  check = false;  break;  }  n /= 10;  }  if(check)  cout << "28tech\n";  else  cout << "29tech\n";  } |

**Bài 3. Số toàn lẻ**

|  |
| --- |
| #include <bits/stdc++.h>  using namespace std;  using ll = long long;  int main(){  #ifndef ONLINE\_JUDGE  freopen("input.txt", "r", stdin);  freopen("output.txt", "w", stdout);  #endif  long long n;  cin >> n;  if(n == 0){  cout << "29tech\n";  return 0;  }  bool check = true;  while(n != 0){  int r = n % 10;  if(r % 2 == 0){  check = false;  break;  }  n /= 10;  }  if(check)  cout << "28tech\n";  else  cout << "29tech\n";  } |

**Bài 4. Phương trình 3 ẩn**

|  |
| --- |
| #include <iostream>  using namespace std;  int main() {  int a, b, c, n; cin >> a >> b >> c >> n;  int dem = 0;  for (int x = a; x <= n; x++) {  for (int y = b; y <= n - x; y++) {  int z = n - x - y;  if (z >= c) {  dem ++ ;  }  }  }  cout << dem;  return 0;  } |

**Bài 5. Tam giác sao và số**

|  |
| --- |
| #include <iostream>  using namespace std;  int main() {  int n; cin >> n;  for (int i = 1; i <= n; i++) {  for (int j = 1; j <= i; j++) {  if (i == 1 || i == n || j == 1 || j == i) {  cout << "\*";  }  else  cout << i;  }  cout << endl;  }  } |

**Bài 6. Tần suất nguyên tố 2**

|  |
| --- |
| #include <bits/stdc++.h>  using namespace std;  using ll = long long;  int main(){  ll n; cin >> n;  int c2 = 0, c3 = 0, c5 = 0, c7 = 0;  ll lat = 0; // lat nguoc so n  while(n){  int r = n % 10;  if(r == 2) ++c2;  if(r == 3) ++c3;  if(r == 5) ++c5;  if(r == 7) ++c7;  lat = lat \* 10 + n % 10;  n /= 10;  }  //tach tu cuoi cua lat => tach tu dau cua n  while(lat){  int r = lat % 10;  if(r == 2 && c2 != 0){  cout << 2 << " " << c2 << endl;  c2 = 0;  }  if(r == 3 && c3 != 0){  cout << 3 << " " << c3 << endl;  c3 = 0;  }  if(r == 5 && c5 != 0){  cout << 5 << " " << c5 << endl;  c5 = 0;  }  if(r == 7 && c7 != 0){  cout << 7 << " " << c7 << endl;  c7 = 0;  }  lat /= 10;  }  } |

**Bài 7. Chữ số đứng giữa lớn nhất**

|  |
| --- |
| #include <bits/stdc++.h>  using namespace std;  using ll = long long;  int main(){  #ifndef ONLINE\_JUDGE  freopen("input.txt", "r", stdin);  freopen("output.txt", "w", stdout);  #endif  int a, b;  cin >> a >> b;  bool check = false;  for(int i = a; i <= b; i++){  //check i thoa man hay ko?  int j = i, k = i;  int max\_digit = j % 10;  int dem = 0;  while(j != 0){  ++dem;  if(j % 10 > max\_digit){  max\_digit = j % 10;  }  j /= 10;  }  bool ok = true;  if(dem % 2 == 0) ok = false;  int d = 0, giua;  while(k != 0){  ++d;  if(d == dem / 2 + 1){  giua = k % 10;  }  k /= 10;  }  if(max\_digit > giua){  ok = false;  }  if(ok){  cout << i << " "; check = true;  }  }  if(check == false){  cout << "28tech\n";  }  } |

**Bài 8. HCN sao và số**

|  |
| --- |
| #include <bits/stdc++.h>  using namespace std;  using ll = long long;  int main(){  #ifndef ONLINE\_JUDGE  freopen("input.txt", "r", stdin);  freopen("output.txt", "w", stdout);  #endif  long long n;  cin >> n;  for(int i = 1; i <= n; i++){  for(int j = 1; j <= n; j++){  if(i == 1 || i == n || j == 1 || j == n){  cout << "\*";  }  else if(i % 2 == 0) cout << "~";  else cout << "#";  }  cout << endl;  }  } |