2020\_2\_C++\_07 과제

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**1.**

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| **소스코드:**  #include <iostream>  #include <string>  using namespace std;  char& find(char a[], char c, bool& success) {  int size = strlen(a);  for (int i = 0; i < size; i++) {  if (a[i] == c)  return a[i];  }  success = false;  return a[0];  }  int main() {  bool success = true;  char s[] = "C++ programing";  cout << "변경전 문자열 = " << s << endl;    find(s, 'a', success) = 'A'; // 'a' => 'k'로 바꾸면 못 찾은 결과  if (success == true)  cout << "변경후 문자열 = " << s << endl;  else  cout << "찾는문자가 없습니다." << endl;  return 0;  } |
| **실행결과:** |

**2.**

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| **소스코드:**  #include <iostream>  using namespace std;  class Account{  int money;  public:  Account(int money);  int getMoney();  void setMoney(int meony);  void show();  };  Account::Account(int money) {  this->money = money;  }  int Account::getMoney() {  return money;  }  void Account::setMoney(int money) {  this->money = money;  }  void Account::show() {  cout << "잔액이 " << money << "원 있습니다." << endl;  }  void increaseBy(Account& account, int money) {  int temp = account.getMoney() + money;  account.setMoney(temp);  }  int main() {  Account account(50000);  int money;  cout << "입금 전 ";  account.show();  cout << "입금액 : ";  cin >> money;  increaseBy(account, money);  cout << "입금 후 ";  account.show();  return 0;  } |
| **실행결과:** |

**3.**

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| **소스코드:**  #include <iostream>  using namespace std;  class Dept {  int size;  int \*scores;  public:  Dept(int size);  Dept(Dept& dept);  ~Dept();  int getSize();  void read();  bool isOver60(int index);  };  Dept::Dept(int size) {  this->size = size;  this->scores = new int[size];  for (int i = 0; i < size; i++) {  scores[i] = 0;  }  }  Dept::Dept(Dept& dept) {  this->size = dept.size;  this->scores = new int[size];  for (int i = 0; i < size; i++)  scores[i] = dept.scores[i];  }  Dept::~Dept() {  delete[] scores;  }  int Dept::getSize() {  return size;  }  void Dept::read() {  cout << size << "개 점수 입력>> " << endl;  for (int i = 0; i < size; i++) {  cout << i + 1 << "] ";  cin >> scores[i];  }  }  bool Dept::isOver60(int i) {  if (scores[i] > 60)  return true;  return false;  }  int countPass(Dept& c) {  int count = 0;  for (int i = 0; i < c.getSize(); i++) {  if (c.isOver60(i) == true)  count++;  }  return count;  }  int main() {  Dept \*com;  int cnt;  cout << "학생 수를 입력하세요 >> ";  cin >> cnt;  com = new Dept(cnt);  com->read();  int n = countPass(\*com);  cout << "60점 이상은 " << n << "명" << endl;  delete com;  return 0;  } |
| **실행결과:** |

**4.**

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| **소스코드:**  #include <iostream>  using namespace std;  class MyIntStack {  char \*p;  int size;  int tos;  public:  MyIntStack();  MyIntStack(int size);  MyIntStack(MyIntStack& s);  ~MyIntStack();  bool push(char n);  bool pop(char &n);  void show();  };  MyIntStack::MyIntStack() {  size = 0;  p = new char[size];  tos = 0;  }  MyIntStack::MyIntStack(int size) {  this->size = size;  p = new char[size];  for (int i = 0; i < size; i++) {  p[i] = NULL;  }  tos = 0;  }  MyIntStack::MyIntStack(MyIntStack& s) {  size = s.size;  p = new char[s.size];  for (int i = 0; i < s.size; i++) {  p[i] = s.p[i];  }  tos = s.tos;  }  MyIntStack::~MyIntStack() {  delete[] p;  }  bool MyIntStack::push(char n) {  if (p[size - 1] != NULL) // 마지막까지 꽉 찼을 때  return false;  for (int i = 0; i < size; i++) {  if (p[i] == NULL) { // 푸시  p[i] = n;  tos = i;  break;  }  }  return true;  }  bool MyIntStack::pop(char& n) {  if (p[0] == NULL) // 스택이 다 비어있을 때  return false;  n = p[tos];  p[tos] = NULL;  tos--;  return true;    }  void MyIntStack::show() {  for (int i = tos; i >= 0; i--)  cout << p[i] << " ";  }  int main() {  MyIntStack a(20);  a.push('a'); a.push('f'); a.push('k');    cout << "== 스택(a) ==" << endl;  a.show();  MyIntStack b = a;  cout << endl << "== 스택(b) ==" << endl;    b.push('q');  b.show();  char n;  a.pop(n);  cout << endl << endl << "스택 a에서 팝한 값 " << n << endl;  b.pop(n);  cout << "스택 b에서 팝한 값 " << n << endl << endl;    return 0;  } |
| **실행결과:** |