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| 2019\_1\_C++ \_14 | 학번 : | 20145165 | 이름 : | 정균모 |

* 내용 점검 – 교재11장 연습문제

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| 번호 | 문제풀이 |
| 1 | 3 |
| 2 | 4 |
| 3 | 키보드 |
| 4 | 모니터 |
| 5 | Cin, cout, clog, cerr |
| 6 | 2 |
| 7 | 1 |
| 8 | Chour |
| 9 | Abc |
| 10 | Get은 /n을 남기고, getline은 /n을 남기지 않는다. |
| 11 | 1 |
| 12 | 15 , /n도 잃은 문자에 포함 |
| 13 | 2,3 |
| 14 | 4 |
| 15 | 4 |
| 16 | %%%%%%%%%C++ |
| 17 | 0.6667~~~~ |
| 18 | #include <iomanip> |
| 19 | cout 객체의 소속 클래스인 ostream에 선언되어 있으며 여러 원형이 있다.  ostream& operator<<(const char \*);  ostream& operator<<(char);  ostream& operator<<(short);  ostream& operator<<(int);  ostream& operator<<(long);  ostream& operator<<(float);  ostream& operator<<(double);  .... |
| 20 | 4 |

* 프로그램 과제

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| 1. 교재 583p : 문제7번 |
| **[프로그램 소스]**  #include <iostream>  #include <iomanip>  #include <cctype>  using namespace std;  int main() {  int cont = 0;  cout << "dec hexa char dec hexa char dec hexa char dec hexa char " << endl;  cout << "---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- " << endl;  for (int i = 0; i < 127; i++) {  cont++;  cout.width(4);  cout.fill(' ');  cout << dec << left << i << " ";  cout.width(4);  cout.fill(' ');  cout << hex << left << i << " ";  char ASCII = i;  if (isprint(ASCII)) {  cout.width(4);  cout.fill(' ');  cout << left << ASCII;  }  else {  cout.width(4);  cout.fill(' ');  cout << left << '.';  }  if (cont == 4) {  cout << endl;  cont = 0;  }  else {  cout << " ";  }  }  system("pause");  } |
| **[실행결과]** |

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| 1. 교재 584p : 문제9번 |
| **[프로그램 소스]**  #include <iostream>  #include <string>  #include <iomanip>  #include <cctype>  using namespace std;  class Phone {  string name;  string telnum;  string address;  public:  Phone(string name = "", string telnum = "", string address = "") {  this->name = name; this->telnum = telnum; this->address = address;  }  friend istream& operator>>(istream& ins, Phone& a);  friend ostream& operator<<(ostream& ino, Phone& a);  };  istream& operator>>(istream& ins, Phone& a) {  cout << "이름:";  ins >> a.name;  cout <<"전화번호:";  ins >> a.telnum;  cout << "주소:";  ins >> a.address;  return ins;  }  ostream& operator<<(ostream& ino, Phone& a){  ino << "(" << a.name << "," << a.telnum << "," << a.address << ")";  return ino;  }  int main() {  Phone girl, boy;  cin >> girl >> boy;  cout << girl << endl << boy << endl;  system("pause");  } |
| **[실행결과]** |

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| 1. 교재 585p : 문제10번 |
| **[프로그램 소스]**  #include <iostream>  #include <string>  using namespace std;  istream& prompt(istream& out) {  cout << "암호?";  return out;  }  int main() {  string password;  while (true) {  cin >> prompt >> password;  if (password == "C++") {  cout << "login success!!" << endl;  break;  }  else  cout << "login fail. try again!!" << endl;  }  system("pause");  } |
| **[실행결과]** |

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| 1. 교재 586p : 문제12번 |
| **[프로그램 소스]**  #include <iostream>  #include <string>  using namespace std;  class coffeeshop {  protected:  string name;  int amount;  bool check;  public:  coffeeshop() {  check = false;  }  void decrease();  int getAmount() { return amount; }  void setAmount(int Am) { this->amount = Am; }  string getName() { return name; }  bool getCheck() { return check; }  void setCheck(bool ch) { this->check = ch; }  };  void coffeeshop::decrease() {  amount -= 1;  if (amount == 0)  check = true;  }  class Coffee : public coffeeshop {  public:  Coffee() { this->name = "Coffee", this->amount = 3; }  };  class Sugar : public coffeeshop {  public:  Sugar() { this->name = "Sugar", this->amount = 3; }  };  class Cream : public coffeeshop {  public:  Cream() { this->name = "Cream", this->amount = 3; }  };  class Water : public coffeeshop {  public:  Water() { this->name = "Water", this->amount = 3; }  };  class Cup : public coffeeshop {  public:  Cup() { this->name = "Cup", this->amount = 3; }  };  class Machine {  coffeeshop \*shop[5];  public:  Machine() {  cout << "------ 명품 커피 자판기켭니다. -------" << endl;  shop[0] = new Coffee();  shop[1] = new Sugar();  shop[2] = new Cream();  shop[3] = new Water();  shop[4] = new Cup();  }  void makeCoffee(int type);  bool check(int type);  void start();  int select();  void refill();  void show();  };  bool Machine::check(int type) {  if (shop[0]->getCheck() || shop[3]->getCheck() || shop[4]->getCheck())  return true;  switch (type) {  case 0:  break;  case 1:  return shop[1]->getCheck();  case 2:  return shop[2]->getCheck();  }  return false;  }  void Machine::makeCoffee(int type) {  if (check(type))  cout << "재료가 부족합니다." << endl;  else {  shop[0]->decrease();  shop[3]->decrease();  shop[4]->decrease();  switch (type) {  case 0:  cout << "맛있는 보통 커피 나왔습니다." << endl;  break;  case 1:  cout << "맛있는 설탕 커피 나왔습니다." << endl;  break;  case 2:  cout << "맛있는 블랙 커피 나왔습니다." << endl;  break;  default:  cout << "잘못 선택하셨습니다.";  }  }  }  void Machine::start() {  while (true) {  show();  int menu = select();  switch (menu) {  case 0:  case 1:  case 2: makeCoffee(menu);  break;  case 3: refill();  break;  case 4:  return;  }  }  }  int Machine::select() {  cout << endl;  cout << "보통 커피:0, 설탕 커피:1, 블랙 커피:2, 채우기:3, 종료:4>>";  int choice = 0;  cin >> choice;  return choice;  }  void Machine::refill() {  cout << "모든 통을 채웁니다.~~" << endl;  for (int i = 0; i < 5; i++) {  shop[i]->setAmount(3);  shop[i]->setCheck(false);  }  }  void Machine::show() {  for (int i = 0; i < 5; i++) {  cout << shop[i]->getName() <<" : " ;  for (int am = 0; am < shop[i]->getAmount(); am++) {  cout << "\*";  }  cout << endl;  }  }  int main() {  Machine m;  m.start();  system("pause");  } |
| **[실행결과]** |