2020\_2\_09\_C++\_실습과제

20175105 곽영주

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| **소스코드:**  #include <iostream>  #include <string>  using namespace std;  class Big {  public:  string big(string a, string b);  int big(char a[], int size);  };  string Big::big(string a, string b) {  if (a > b)  return a;  else  return b;  }  int Big::big(char a[], int size) {  int index = 0;  for (int i = 1; i < size; i++) {  if (a[index] < a[i])  index = i;  }  return index;  }  int main() {  Big b;  char ch[] = { 'd','a','e','A','p','x','q' };  int size = sizeof(ch) / sizeof(ch[0]);  cout << "big(list, array) : " << b.big("list", "array") << endl;  cout << "big(ch," << size << "): " << ch[b.big(ch, size)] << endl;  return 0;  } |
| **실행결과:** |

2.

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| **소스코드:**  #include <iostream>  using namespace std;  int add(int a[], int size, int b[] = nullptr) {  int sum = 0;  for (int i = 0;i < size; i++)  sum += a[i];  if (b == nullptr)  return sum;  else {  for (int i = 0; i < size; i++)  sum += b[i];  return sum;  }  }  int main() {  int a[] = { 1,2,3,4,5 };  int b[] = { 6,7,8,9,10 };  int c = add(a, 5);  int d = add(a, 5, b);  cout << c << endl << d << endl;  return 0;  } |
| **실행결과:** |

3.

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| **7주차 과제에서 풀어서 제출했습니다.** |

4.

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| **소스코드:**  #include <iostream>  #include <string>  using namespace std;  class Sugang {  string subject;  int number;  public:  void sugangshow();  int getNumber();  void setSugang(string subject, int number);  };  void Sugang::sugangshow() {  cout << "과목명: " << subject << " 학점: " << number << endl;  }  int Sugang::getNumber() {  return number;  }  void Sugang::setSugang(string subject, int number) {  this->subject = subject;  this->number = number;  }  class Student {  string hakbeon;  Sugang\* s;  int size, totalhak;  public:  Student(string hakbeon, int size) : totalhak(0) {  this->hakbeon = hakbeon;  this->size = size;  s = new Sugang[size];  setHak();  }  void show() {  cout << "== 수강신청 내역 ==" << endl;  cout << "학번: " << hakbeon << endl;  for (int i = 0; i < size; i++)  s[i].sugangshow();  cout << "신청학점: " << totalhak << endl;  }  ~Student() {  delete[] s;  }  Student(Student& std) {  hakbeon = std.hakbeon;  size = std.size;  s = new Sugang[std.size];  for (int i = 0; i < std.size; i++)  s[i] = std.s[i];  totalhak = std.totalhak;  }  void setHak() {  totalhak = 0;  string subject;  int number;  for (int i = 0; i < size; i++) {  cout << i + 1 << ") 과목과 학점을 입력하세요>> ";  cin >> subject >> number;  s[i].setSugang(subject, number);  totalhak += number;  }  }  };  int main() {  int index = 0;  string beon, num;  Student \*std[100];  while (index < 100) {  cout << index + 1 << ">> 학번과 수강과목 수를 입력하세요: ";  cin >> beon >> num;  if (beon == "0" && num == "0")  break;  std[index] = new Student(beon, stoi(num));  index++;  }  for (int i = 0; i < index; i++)  std[i]->show();  for (int i = 0; i < index; i++) {  delete std[i];  cout << "Student 메모리 반납" << endl;  }  return 0;  } |
| **실행결과:** |