Bài tập 1 – IT002.M11.KHTN.1
Huỳnh Hoàng Vũ – 20520864

BTTuan2/ Bài 1

PhanSo
- numerator: int - denominator: int
+ PhanSo(const int &numerator = 0, const int &denominator = 1): numerator(numerator), denominator(denominator) + PhanSo(const PhanSo &phanSo) + ~PhanSo() + operator+(const PhanSo &phanSo) const: PhanSo + operator-(const PhanSo &phanSo) const: PhanSo + operator*(const PhanSo &phanSo) const: PhanSo + operator/(const PhanSo &phanSo) const: PhanSo + friend operator<<(ostream &output, const PhanSo &phanSo): ostream& + friend operator>>(istream &input, PhanSo &phanSo): istream& + dinhGiaTri(): double

BTTuan2/ Bài 2

ComplexNum
- a: double - b: double
+ ComplexNum(const double &a = 0, const double &b = 0): a(a), b(b) + ComplexNum(const ComplexNum &complexNum) + ~ComplexNum() + friend operator<<(ostream &output, const ComplexNum &complexNum): ostream& + friend operator>>(istream &input, ComplexNum &complexNum): istream& + operator+(const ComplexNum &complexNum) const: ComplexNum + operator-(const ComplexNum &complexNum) const: ComplexNum + operator*(const ComplexNum &complexNum) const: ComplexNum + operator/(const ComplexNum &complexNum) const: ComplexNum

BTTuan2/ Bài 3

Candidate
- candidateID: string - fullName: string - dateOfBirth: string - mathTestScore: double - literatureTestScore: double - englishTestScore: double
+ Candidate(const string &candidateID = "20520864", const string &fullName = "Vincent Huynh", const string &dateOfBirth = "21/09/2002", const double &mathTestScore = 8, const double &literatureTestScore = 5, const double &englishTestScore = 5.5): candidateID(candidateID), fullName(fullName), dateOfBirth(dateOfBirth), mathTestScore(mathTestScore), literatureTestScore(literatureTestScore), englishTestScore(englishTestScore) + Candidate(const Candidate &candidate) + ~Candidate() + setCandidateID(const string &candidateID): Candidate& + setFullName(const string &fullName): Candidate& + setDateOfBirth(const string &dateOfBirth): Candidate& + setMathTestScore(const double &mathTestScore): Candidate& + setLiteratureTestScore(const double &literatureTestScore): Candidate& + setEnglishTestScore(const double &englishTestScore): Candidate& + getCandidateID() const: string + getFullName() const: string + getDateOfBirth() const: string

+ getMathTestScore() const: double
+ getLiteratureTestScore() const: double
+ getEnglishTestScore() const: double

TestCandidate
- candidate: vector<Candidate>
- static isTotalScoreGreaterThan15(const Candidate &candidate): bool
- static printCandidate(const Candidate &candidate): void
+ TestCandidate(): candidate()
+ TestCandidate(const TestCandidate &testCandidate)
+ ~TestCandidate()
+ inputNCandidates(const int &n): void
+ printCandidatesWithATotalScoreGreaterThan15() const: void

BTTuan2/ Bài 4

Point
- x: double
- y: double
+ Point(const double &x = 0, const double &y = 0): x(x), y(y)
+ Point(const Point &point)
+ ~Point()
+ setX(const double &x): Point&
+ setY(const double &y): Point&
+ set(const double &x, const double &y): Point&
+ getX() const: double
+ getY() const: double
+ translate(const pair<double,double> &vector): Point
+ friend operator>>(istream &input, Point &point): istream&
+ friend operator<<(ostream &output, const Point &point): ostream&

BTTuan2/ Bài 5

TamGiac
- A: Point
- B: Point
- C: Point
+ TamGiac(): A(), B(), C()
+ TamGiac(const Point &A, const Point &B, const Point &C): A(A), B(B), C(C)
+ TamGiac(const TamGiac &tamGiac)
+ ~TamGiac()
+ friend operator>>(istream &input, TamGiac &tamGiac): istream&
+ friend operator<<(ostream &output, const TamGiac &tamGiac): ostream&
+ translate(const pair<double,double> &vector) const: TamGiac
+ rotate(const double &angle) const: TamGiac
+ dilate(const double &times) const: TamGiac
+ contract(const double &times) const: TamGiac

BTTuan2/ Bài 6

DaGiac
- point: vector<Point>
+ DaGiac(): point()
+ DaGiac(const vector<Point> &point): point(point)
+ DaGiac(const DaGiac &daGiac)
+ ~DaGiac()
+ friend operator>>(istream &input, DaGiac &daGiac): istream&
+ friend operator<<(ostream &output, const DaGiac &daGiac): ostream&
+ translate(const pair<double,double> &vector) const: DaGiac

+ rotate(const double &angle) const: DaGiac
+ dilate(const double &times) const: DaGiac
+ contract(const double &times) const: DaGiac

BTTuan2/ Bài 7

Time
- hour: int
- minute: int
- second: int
+ Time(const int &hour = 0, const int &minute = 0, const int &second = 0): hour(hour), minute(minute), second(second)

+ rotate(const double &angle) const: DaGiac
+ dilate(const double &times) const: DaGiac
+ contract(const double &times) const: DaGiac

BTTuan2/ Bài 7

Time
- hour: int - minute: int - second: int
+ Time(const int &hour = 0, const int &minute = 0, const int &second = 0): hour(hour), minute(minute), second(second) + Time(const Time &time) + ~Time() + friend operator>>(istream &input, Time &time): istream& + friend operator<<(ostream &output, const Time &time): ostream& + addOneSecond(): void