​#​include​<​iostream​>

​using​ ​namespace​ ​std​;

​class​ ​candy\_machine

​{

​protected:

​        ​int​ candies, chips, gum, cookies,amount;

​public:

​        ​candy\_machine​()

​        {

​                candies = ​10​;

​                chips = ​10​;

​                gum = ​10​;

​                cookies = ​10​;

​                amount = ​0​;

​        }

​        ​void​ ​display​()

​        {

​                cout << ​"​\t​-:Candy Machine:-​"​ << endl;

​                cout << ​"​Serial No  Product​\t​"​ << ​"​Price​\t​"​ <<​"​Items​"​<< endl;

​                cout << ​"​1​\t​   Candies​\t​"​ << ​"​5​\t​"​ <<candies<< endl;

​                cout << ​"​2​\t​   Chips​\t​"​ << ​"​10​\t​"​ <<chips<< endl;

​                cout << ​"​3​\t​   Gum​\t\t​"​ << ​"​10​\t​"​ <<gum<< endl;

​                cout << ​"​4​\t​   Cookies​\t​"​ << ​"​20​\t​"​ <<cookies<< endl;

​        }

​        ​void​ ​selection​()

​        {

​                ​int​ N,am;

​                ​int​ money;

​                ​int​ ​select​;

​                cout << ​"​please enter your selection(1 for candies and so on):​"​ << endl;

​                cin >> ​select​;

​                ​if​ (!cin << ​select​)

​                {

​                        cout << ​"​Invalid number!​"​ << endl;

​                        cin.​clear​();

​                        cin.​ignore​(numeric\_limits<streamsize>::​max​(), ​'​\n​'​);

​                        ​selection​();

​                }

​                ​else

​                {

​                        label:

​                        cout << ​"​enter number of item:​"​ << endl;

​                        cin >> N;

​                        ​if​(!cin>>N)

​                        {

​                                cout << ​"​Invalid number!​"​ << endl;

​                                cin.​clear​();

​                                cin.​ignore​(numeric\_limits<streamsize>::​max​(), ​'​\n​'​);

​                                ​goto​ label;

​                        }

​                        ​else

​                        {

​                                ​switch​ (​select​)

​                                {

​                                ​case​ ​01​:

​                                        money = ​5​ \* N;

​                                        ​if​ (N <= candies)

​                                        {

​                                                cout << ​"​Your amount is: ​"​ << money << endl;

​                                                cout << ​"​Enter Amount: ​"​ << endl;

​                                                cin >> am;

​                                                ​if​ (am >= money)

​                                                {

​                                                        ​accept\_money​(money);

​                                                        ​Dispenser​(N, &candies);

​                                                        cout << ​"​Amount added!​"​ << endl;

​                                                        cout << ​"​Thanks for shopping!​"​ << endl;

​                                                }

​                                                ​else

​                                                        cout << ​"​you enter less amount!​"​ << endl;

​                                                ​selection​();

​                                        }

​                                        ​else

​                                                cout << ​"​less product is available!​"​ << endl;

​                                        ​break​;

​                                ​case​ ​02​:

​                                        money = ​10​ \* N;

​                                        ​if​ (N <= chips)

​                                        {

​                                                cout << ​"​Your amount is: ​"​ << money << endl;

​                                                cout << ​"​Enter Amount: ​"​ << endl;

​                                                cin >> am;

​                                                ​if​ (am >= money)

​                                                {

​                                                        ​accept\_money​(money);

​                                                        ​Dispenser​(N, &chips);

​                                                        cout << ​"​Amount added!​"​ << endl;

​                                                        cout << ​"​Thanks for shopping!​"​ << endl;

​                                                }

​                                                ​else

​                                                        cout << ​"​you enter less amount!​"​ << endl;

​                                                ​selection​();

​                                        }

​                                        ​else

​                                                cout << ​"​less product is available!​"​ << endl;

​                                        ​break​;

​                                ​case​ ​03​:

​                                        money = ​10​ \* N;

​                                        ​if​ (N <= gum)

​                                        {

​                                                cout << ​"​Your amount is: ​"​ << money << endl;

​                                                cout << ​"​Enter Amount: ​"​ << endl;

​                                                cin >> am;

​                                                ​if​ (am >= money)

​                                                {

​                                                        ​accept\_money​(money);

​                                                        ​Dispenser​(N, &gum);

​                                                        cout << ​"​Amount added!​"​ << endl;

​                                                        cout << ​"​Thanks for shopping!​"​ << endl;

​                                                }

​                                                ​else

​                                                        cout << ​"​you enter less amount!​"​ << endl;

​                                                ​selection​();

​                                        }

​                                        ​else

​                                                cout << ​"​less product is available!​"​ << endl;

​                                        ​break​;

​                                ​case​ ​04​:

​                                        money = ​20​ \* N;

​                                        ​if​ (N <= cookies)

​                                        {

​                                                cout << ​"​Your amount is: ​"​ << money << endl;

​                                                cout << ​"​Enter Amount: ​"​ << endl;

​                                                cin >> am;

​                                                ​if​ (am >= money)

​                                                {

​                                                        ​accept\_money​(money);

​                                                        ​Dispenser​(N, &cookies);

​                                                        cout << ​"​Amount added!​"​ << endl;

​                                                        cout << ​"​Thanks for shopping!​"​ << endl;

​                                                }

​                                                ​else

​                                                        cout << ​"​you enter less amount!​"​ << endl;

​                                                ​selection​();

​                                        }

​                                        ​else

​                                                cout << ​"​less product is available!​"​ << endl;

​                                        ​break​;

​                                ​default​:

​                                        cout << ​"​You enter invalid number!​"​ << endl;

​                                }

​                        }

​                }

​        }

​        ​void​ ​accept\_money​(​int​ M)

​        {

​                amount = +M;

​        }

​        ​void​ ​cash\_register​()

​        {

​                cout << ​"​Amount is: ​"​ << amount << endl;

​        }

​        ​void​ ​Dispenser​(​int​ n,​int​ \*x)

​        {

​                \*x = \*x - n;

​        }

​};

​int​ ​main​()

​{

​        candy\_machine obj;

​        ​int​ n=​1​;

​        obj.​display​();

​        ​while​ (n)

​        {

​                obj.​selection​();

​                cout << ​"​For continue press 1 for teminate press 0:​"​ << endl;

​                cin >> n;

​        }

​        ​system​(​"​pause​"​);

​}