**Astaño Leslie**

**BSIT-1A**

**CANDY MACHINE**

class candy\_Machine {

string items[4];//intialized by constructor the name of the items

double price[4]; //intilized by constructor the price of items

int choice; //stores the choice of item to be selected

double E\_amount; //stores the Amount entered by the user

double r\_amount; //stores the reaming amount if the entered amount is greater than the item price

public:

candy\_M(); //constructor

void menu(); //declaration of a function display the menu of items

void set\_Choice(int); //declaration of a function set the choice entered ny the user

void set\_amount(double); //declaration of a function set the Amount entered ny the user

void check\_Amount()const; //declaration of a function check wheather the amont entered is == or > or < then the items price

};

int main()

{

int ch;

double am;

candy\_M M1; //creating object

M1.menu(); //display menu

while (!(cin >> ch) || (ch>4 || ch <= 0)) //takes the choice and checking it if it is valid or not

{

cin.clear();

cin.ignore(900, '\n');

cout << " Invalid choice!\nAgain Enter the Choice:";

}

M1.set\_Choice(ch);

cout << "Enter the Amount :";

while (!(cin >> am) || (am <= 0)) //takes the Amount and checking it if it is valid or not

{

cin.clear();

cin.ignore(900, '\n');

cout << " Invalid Amount!\nAgain Enter the Amount:";

}

M1.set\_amount(am);

M1.check\_Amount();

return 0;

}

void candy\_M::menu()//function display the menu of items

{

cout << "\*\*\*\*\*\*\*\*\*\*\*\*\*\*CANDY MACHINE\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n";

cout << "\t 1 for Chips RS 50.\n";

cout << "\t 2 for Candies RS 20.\n";

cout << "\t 3 for Gum RS 10.\n";

cout << "\t 4 for Cookies RS 40.\n";

cout << "Enter your Choice :";

}

void candy\_M::set\_Choice(int ch) //function set the choice entered ny the user

{

choice = ch - 1;

}

void candy\_M::set\_amount(double p) //function set the Amount entered ny the user

{

E\_amount = p;

}

void candy\_M::check\_Amount()const //function check wheather the amont entered is == or > or < then the items price

{

double am = E\_amount - price[choice];

if (am > 0)

{

cout << "Take the Remaining Money\n";

cout << "You the purchased the item\nTake the item\n";

}

else if (am == 0)

cout << "You the purchased the item\nTake the item";

else

cout << "\nYou have entered the Amount less than the price of an item\n";

}

candy\_M::candy\_M() //Constructor

{

items[0] = "Chips";

items[1] = "Candies";

items[2] = "Gum";

items[3] = "Cookies";

price[0] = 50;

price[1] = 20;

price[2] = 10;

price[3] = 40;

}