

1. (2 pt.)

```
all: program

program: file1.o file2.o file3.o file4.o
        g++ file1.o file2.o file3.o file4.o -o program

file1.o: file1.cpp
        g++ -c file1.cpp

file2.o: file2.cpp
        g++ -c file2.cpp

file3.o: file3.cpp
        g++ -c file3.cpp

file4.o: file4.cpp
        g++ -c file4.cpp

clean:
        rm -rf *.o program
```

2. (3 pt.)

- a) 5
- b) Address of 6
- c) DE
- d) B
- e) EFG
- f) I

3. (2 pt.)

```
bool strEq1 (const char A[], const char B[])
{
    int i=0;
    bool rval=false;
    while ((A[i]==B[i]) && (A[i]!='\0') && (B[i]!='\0'))
        i++;
    if (A[i]== B[i])
        rval=true;

    return rval;
}
```

4. (3 pt.)

```
Node *insertNode (Node *list)
{
    Node *tmp = list; // temporary pointer to traverse linked list
    Node *newNode = new Node;
    cout << " a integer value: " << endl;
    cin >> newNode->info;
    // list is empty
    if (list == NULL)
        list = newNode;

    else
    {
        //Find the last node or duplication
        while ((tmp->next != NULL) && ((tmp->info != newNode->info))
            tmp = tmp->next;
        if (tmp->info == newNode->info)
        {
            cout << newNode->info << " is already in the list! " << endl;
            delete newNode;
        }
        else
            //insert as the last element
            tmp->next = newNode;
    }
    return list;
}
```