1. 1-2 DATASTRUCTURES

2a)

void push(int item){

if (count == max){

cout << “Stack is full.” << endl;

}

else {

node \*p = new node;

if (sp == null) {

count ++;

p->datum = item;

p->next = null;

sp = p;

delete p;

}

else {

count ++;

node \*p = new node;

p->datum = item;

p->next = sp;

sp = p;

delete p;

}

}

2b)

void pop(){

if (sp == null){

cout << "memory allocation error" << endl;

exit(1);

else{

count--;

node \*p = sp;

sp = p->next;

cout << p->datum;

delete p;

}

3)

25-(10-3)=18

18

4)

17