Task 1:

```
#include <iostream>

using namespace std;

bool checkExpression2(string s){

   if(s.length()!=3){
      return false;
   }

   if(((s[0]>='A' && s[0]<='Z') || (s[0]>='a' && s[0]<='z')) && s[1]=='+' && s[2]=='+' ){
      return true;
   }

   if(s[0]=='+' && s[1]=='+' && ((s[2]>='A' && s[2]<='Z') || (s[2]>='a' && s[2]<='z'))  ){
      return true;
   }

   if(((s[0]>='A' && s[0]<='Z') || (s[0]>='a' && s[0]<='z')) && s[1]=='-' && s[2]=='-' ){
      return true;
   }

   if(s[0]=='-' && s[1]=='-' && ((s[2]>='A' && s[2]<='Z') || (s[2]>='a' && s[2]<='z'))  ){
      return true;
   }

   return false;
}
```

```
int main()
{
   string s;
   cin>>s;

   if(checkExpression2(s)){
      cout<<"Valid"<<endl;
   } else{
      cout<<"Invalid"<<endl;
   }
   return 0;
}
```

Output:

```
X++
Invalid

Process returned 0 (0x0)   execution time : 7.308 s
Press any key to continue.
```

Task 2:

```
#include <iostream>

using namespace std;

int main()
{
   string line;
   getline(cin,line);
```

```
bool isOperator=true;
bool valid=true;

for(int i=0;i<line.length();i++){
  char ch=line[i];

  if(ch==' '){
      continue;
  }

  if((ch>='A' && ch<='Z') || (ch>='a' && ch<='z')){
     if(!isOperator){
        valid=false;
        break;
     }
     isOperator=false;
  } else if(ch=='+' || ch=='-' || ch=='*' || ch=='/'){
     if(isOperator){
        valid=false;
        break;
     }
     isOperator=true;
  } else{
     valid=false;
     break;
  }
}

if(isOperator){
```

```
        valid=false;
    }

    if(valid){
        cout<<"Valid"<<endl;
    } else{
        cout<<"Invalid"<<endl;
    }

    return 0;
}
```

Output:

```
A+B*C
Valid

Process returned 0 (0x0)   execution time : 9.116 s
Press any key to continue.
```