#include <stdio.h>

#include <stdlib.h>

#include <string.h>

int main()

{

int n;

scanf("%d",&n);

char nayan[30];

fgets(nayan,30, stdin);

int p = strlen(nayan);

if (p > 0 && nayan[p - 1] == '\n')

nayan[p-1] = '\0';

for(int i=0;i<n;i++){

fgets(nayan,30, stdin);

p = strlen(nayan);

if (p > 0 && nayan[p - 1] == '\n')

nayan[p-1] = '\0';

if(strlen(nayan)<3){

if(nayan[0] == '+' && nayan[1] == '\0'){

printf("Arithmatic Addition Operator \n");

}

else if(nayan[0] == '-' && nayan[1] == '\0'){

printf("Arithmatic Substraction Operator \n");

}

else if(nayan[0] == '\*' && nayan[1] == '\0'){

printf("Arithmatic Multiplication Operator \n");

}

else if(nayan[0] == '/' && nayan[1] == '\0'){

printf("Arithmatic Substraction Operator \n");

}

else if(nayan[0] == '%' && nayan[1] == '\0'){

printf("Arithmatic Modulus Operator \n");

}

else if(nayan[0] == '+' && nayan[1] == '+'){

printf("Increment Operator \n");

}

else if(nayan[0] == '-' && nayan[1] == '-'){

printf("Decrement Operator \n");

}

else if(nayan[0] == '=' && nayan[1] == '\0'){

printf("Assignment Operator \n");

}

else if(nayan[0] == '>' && nayan[1] == '\0'){

printf("Relational Greater than Operator \n");

}

else if(nayan[0] == '>' && nayan[1] == '='){

printf("Relational Greater than equal Operator \n");

}

else if(nayan[0] == '<' && nayan[1] == '\0'){

printf("Relational less than Operator \n");

}

else if(nayan[0] == '<' && nayan[1] == '='){

printf("Relational Greater than equal Operator \n");

}

else if(nayan[0] == '=' && nayan[1] == '='){

printf("Relational equal to Operator \n");

}

else if(nayan[0] == '!' && nayan[1] == '='){

printf("Relational not equal to Operator \n");

}

else if(nayan[0] == '&' && nayan[1] == '&'){

printf("Logical and Operator \n");

}

else if(nayan[0] == '|' && nayan[1] == '|'){

printf("Logical or Operator \n");

}

else if(nayan[0] == '!' && nayan[1] == '\0'){

printf("Logical not Operator \n");

}

else if(nayan[0] == '&' && nayan[1] == '\0'){

printf("Bitwise and Operator \n");

}

else if(nayan[0] == '|' && nayan[1] == '\0'){

printf("Bitwise or Operator \n");

}

else if(nayan[0] == '~' && nayan[1] == '\0'){

printf("Bitwise compliment Operator \n");

}

else if(nayan[0] == '^' && nayan[1] == '\0'){

printf("Bitwise XOR Operator \n");

}

else if(nayan[0] == '>' && nayan[1] == '>'){

printf("Bitwise right shift Operator \n");

}

else if(nayan[0] == '<' && nayan[1] == '<'){

printf("Bitwise left shift Operator \n");

}

else{

printf("This is not an operator \n");

}

}

else{

printf("This is not an operator \n");

}

}

}