**STACK BASED CALCULATOR**

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define MAX\_SIZE 100

int stack[MAX\_SIZE];

int top = -1;

void push(int data) {

if (top >= MAX\_SIZE - 1) {

printf("Stack Overflow\n");

return;

}

stack[++top] = data;

}

int pop() {

if (top < 0) {

printf("Stack Underflow\n");

return -1;

}

return stack[top--];

}

int peek() {

if (top < 0) {

printf("Stack is Empty\n");

return -1;

}

return stack[top];

}

int main() {

int i, num1, num2, result;

char op;

printf("Simple Calculator\n");

printf("1. Add\n");

printf("2. Subtract\n");

printf("3. Multiply\n");

printf("4. Divide\n");

while (1) {

printf("Enter choice: ");

scanf("%d", &i);

switch (i) {

case 1:

printf("Enter two numbers: ");

scanf("%d %d", &num1, &num2);

push(num2);

push(num1);

op = 'A';

break;

case 2:

printf("Enter two numbers: ");

scanf("%d %d", &num1, &num2);

push(num2);

push(num1);

op = 'S';

break;

}