***DAY 6***

***ASSIGNMENT***

***Question 1 :***

***Write a function to find the maximum element in the stack.***

***Question 2:***

***Write a function to find the minimum element in the stack.***

***ANSWER:***

***1.***

#include<stdio.h>

int stack[50], top = -1, size;

void push(int x);

void display();

int main()

{

printf("Enter the size of the stack: ");

scanf("%d", &size);

push(10);

push(20);

push(30);

push(40);

push(50);

display();

max=display\_max();

printf("The maximum element in the stack is %d”,max);

return 0;

}

void push(int x)

{

if(top == size - 1)

{

printf("Overflow\n")

return;

}

stack[++top] = x;

}

void display()

{

int i;

if(top == -1)

{

printf("No element to display\n");

return;

}

for(i = top; i >= 0; i--)

{

printf("----\n");

printf("|%d|\n", stack[i]);

}

printf("----\n");

}

void display\_max()

{

int i,max;

if(top == -1)

{

printf("No element to display\n");

return;

}

max=stack[top];

for(i = top; i >= 0; i--)

{

if(stack[i]>max)

{

max=stack[i];

}

}

return max;

}

***2.***

#include<stdio.h>

int stack[50], top = -1, size;

void push(int x);

void display();

int main()

{

printf("Enter the size of the stack: ");

scanf("%d", &size);

push(10);

push(20);

push(30);

push(40);

push(50);

display();

min=display\_min();

printf("The minimum element in the stack is %d”,min);

return 0;

}

void push(int x)

{

if(top == size - 1)

{

printf("Overflow\n")

return;

}

stack[++top] = x;

}

void display()

{

int i;

if(top == -1)

{

printf("No element to display\n");

return;

}

for(i = top; i >= 0; i--)

{

printf("----\n");

printf("|%d|\n", stack[i]);

}

printf("----\n");

}

void display\_min()

{

int i,min;

if(top == -1)

{

printf("No element to display\n");

return;

}

min=stack[top];

for(i = top; i >= 0; i--)

{

if(stack[i]<min)

{

min=stack[i];

}

}

return min;

}