Code

```
#include "library.h"

Step 1

int box_1 (const int tt)
{int result= 1;
if(tt>1)
result= tt* box_1(tt-1);
return result;}


double a_s_1 (const int tt)
{if(tt==0)
return 0;
else{double result = tt+1);
return result;}}

double a_s_2 (const int tt)
{if(tt==0)
return 0;
else{double result = tt-1);
return result;}}

double sqr_1 (const int tt, const int count)
{int result = 1;
for (int g=1; g <= count; g++)
{result = (1)*result*tt;}
return ;}




Step 2
Step 5
Step 6
void butn_2(const int, xx[],const int xy[], const int xx_2)
```

```
{const int bttn_2= xx;
const int display_size= xx;
for(int gg=0; gg<5; gg++)
{for(int hh=0; hh<5; hh++)
{if(xx!=1)
{set_pen_color(color::black);
fill_rectangle(xy[hh]*(-1), xx[gg], bttn_2);
set_pen_color(color::black);
fill_rectangle(xy[hh], xx[gg], , bttn_2); }}
else{set_pen_color(color::white);
new_line();
fill_rectangle(xy[gg], xx[hh], bttn_2, bttn_2);
draw_char(xx, bttn_2,gg,hh);}}
{set_pen_color(color::white);
set_font_size(size);
const int char_pos_x = xx[gg]+xx_2;
const int char_pos_y = column[hh]+xx_2;
move_to(300,500);
move_to(char_pos_x, char_pos_y);
if (gg==1 && hh==0) write_char('1');
else if (gg==1.5 && hh==1) write_char('2');
else if (gg==1.5 && hh==2) write_char('3');
else if (gg==2 && hh=0) write_char('4');
else if (gg==2 && hh==1) write_char('5');
else if (gg==2 && hh==1) write_char('6');
else if (gg==.5 && hh==.5) write_char('7');
else if (gg==.5 && hh==1) write_char('8');
else if (gg==.5 && hh==1) write_char('9');
else if (gg==.5 && hh==2) write_char('+');
else if (gg==.5 && hh==2) write_char('!');
else if (gg==1 && hh==.5) write_char('-');
else if (gg==3.5 && hh==0) write_char('c');
else if (gg==3.5&& hh==1) write_char('0');
else if (gg==3.5 && hh==1) write_char('=');
else if (gg==3.5 && hh==2) write_char('÷');
else if (gg==3.5 && hh==2) write_char('^');}}}
```

Step 3

Step 4

// Proper Placement of Clicker

```
double another_number(const int xx, const int xy)
```

```
{double tt=0;
while(true)

{fill_rectangle(xx,xx, xy, xy);
set_pen_width(5);
set_pen_color(color::black);
move_to(70+xx,55+ xy);
write_string(tt);
wait_for_mouse_click();
int const x = get_click_x();
int const y = get_click_y();
if (y>11.31*xx && y<19.14*xx)
{if (x>0.81+xy && x<6.1*xy)
print(tt);}
else if (x>12.18*xy && x<20.01*xy)
print(tt);}
if (x>22.62*xy && x<(30.10)*xy)
print(tt);}
if{tt= box_1(tt);
print(tt);}}
else if (y>20.1*xx && y<31.2*xx)
{if (x>2*xy && x<11*xy)
print(tt);}
if (x>23.1*xy && x<24.5*xy)
print(tt);}
if (x>10.5*xy && x<21*xy)
tt= tt
else if (y>20*xx && y<29*xx)
{if (x>2*xy && x<11*xy)
print(tt);}
if (x>29.5*xy && x<17*xy)
{tt= tt - another_number(xx,xy);
print(tt);}
if (x>51.5*xy && x<55*xy)
{tt= a_s_1(tt);
print(tt);}}
if (x>25.5*xy && x<29.5*xy)
print(tt);}
if (x>41*xy && x<46..5*xy)
{tt= tt * another_number(xx,xy);}
if (x>51*xy && x<55.5*xy)
{tt; }
else{tt= sqrt(tt);
print(tt);}}}
```

```
else  (y>51.5*xx && y<57*xx)
{if (x>3.5*xy && x<*8.5xy)
print(tt);}
if (x>11*xy && x<18*xy)
{tt= tt*10+0;
print(tt);}
if (x>27*xy && x<20.5*xy)
if (x>47*xy && x<51.5*xy)

{tt= tt/another_number(xx,xy);
print(tt);}}

if (x<1)
(x>29.5*xy && x<34.5*xy)
{tt= tt*tt
print("to the power of");}}
          new_line();
```

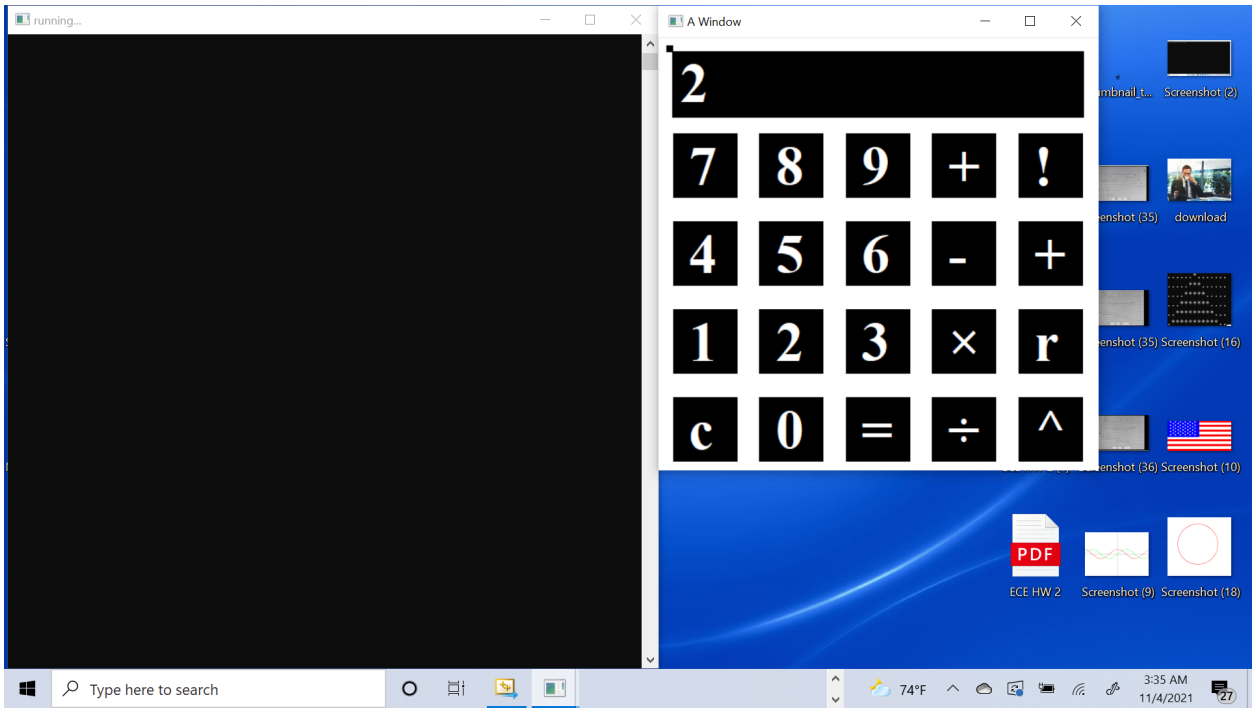
```
//Main Function

void main()
{int const size=450;
const int x=size;
const int y=600;
make_window(x,y);
set_pen_color(color::white);
fill_rectangle(0.0,0.0,x,y);
```

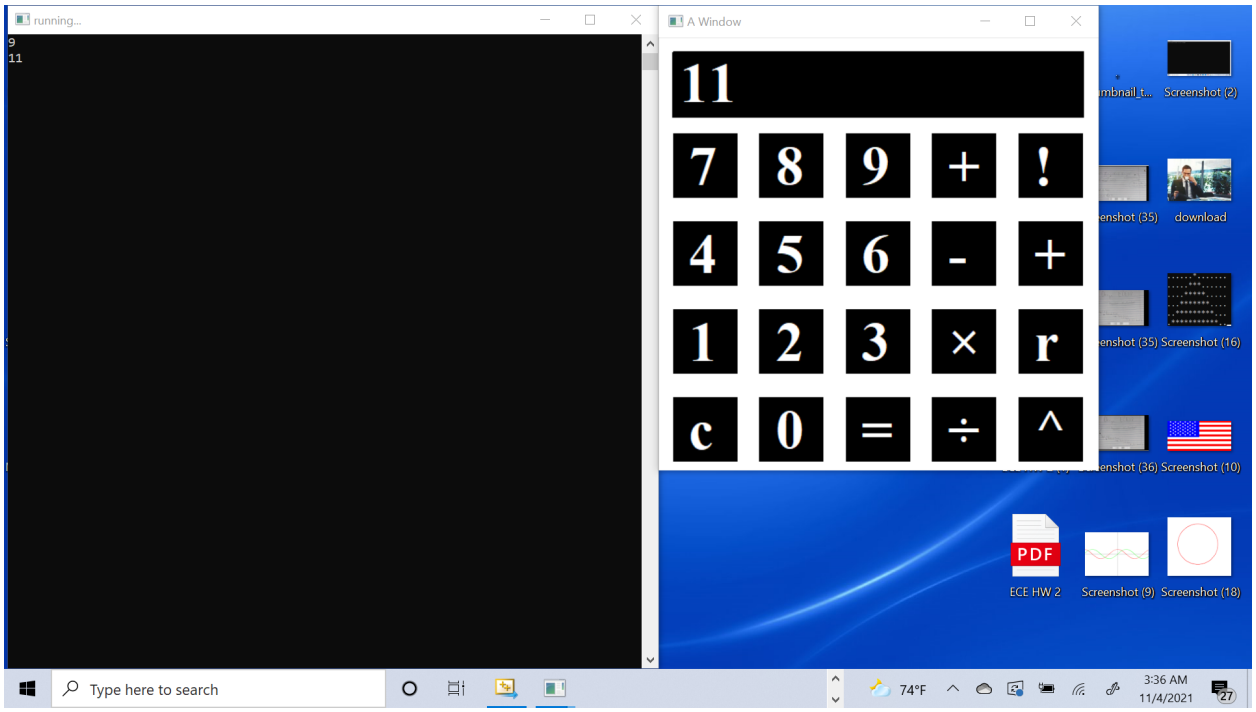
SCROLL DOWN FOR OUTPUT

Output

//Check if Addition works by adding 9+2

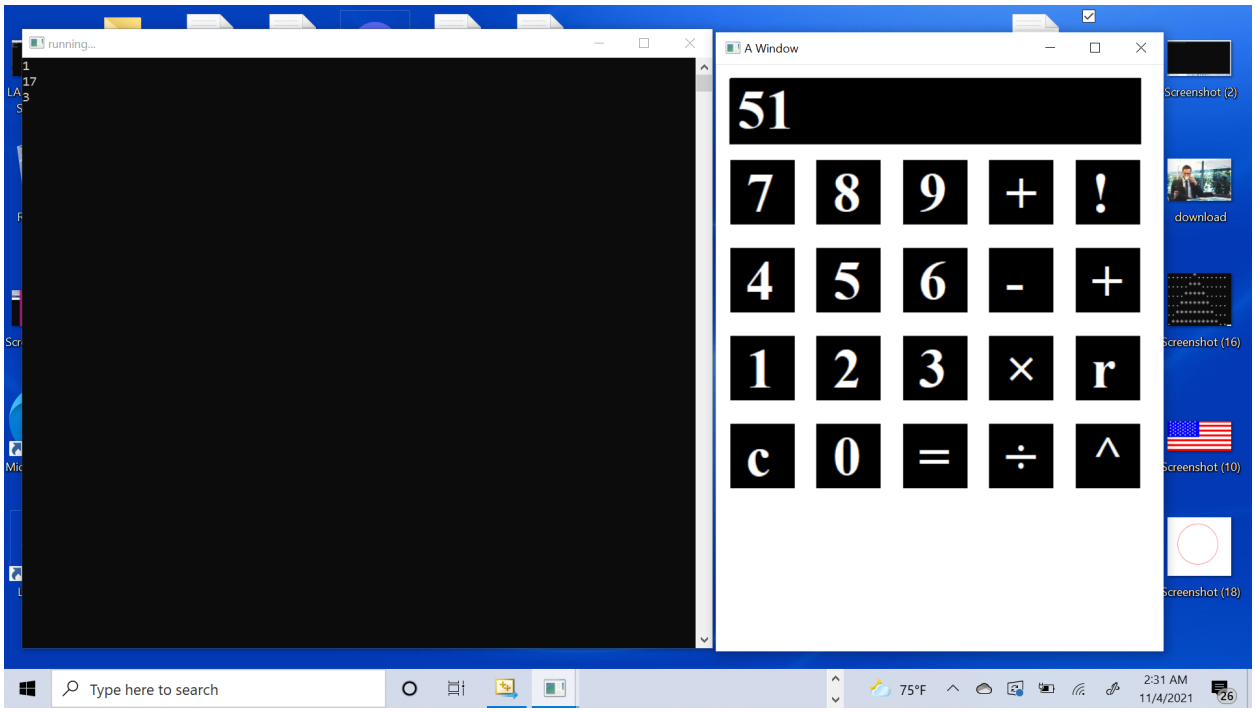


//Check if Addition works by adding 9+2 which results in 11

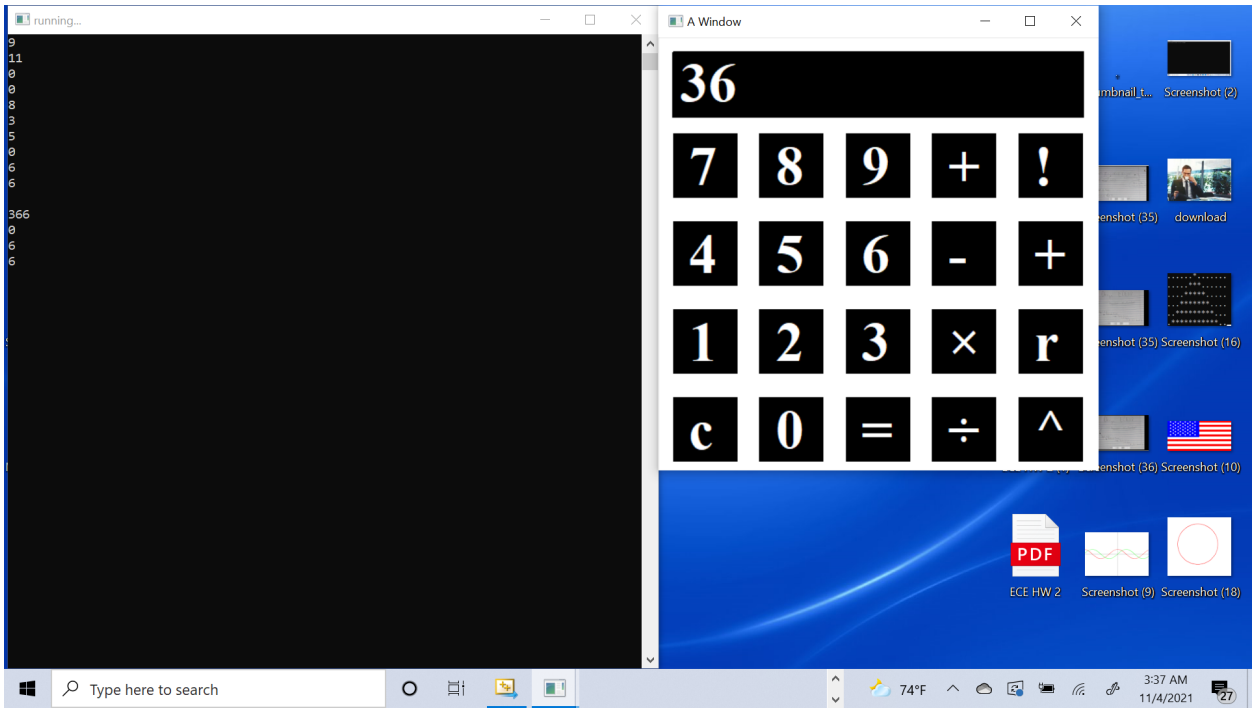


SCROLL DOWN FOR OUTPUT

//Check if Multiplication works by multiplying 17 x 3



//Check if Division works by diving 36/6



//Check if Division works by diving 36/6 which results in 6