void process\_infile ( const int& shift, const string& key ) // Subroutine to display the output of the give ndetails by the user.

{

cout<<"Shift = "<<shift<<"\n";

cout<<"Key = "<<key<<"\n";

string input\_file\_line; // Declarations of variables required for displaying the output in a format.

string new\_input\_file\_line;

ifstream input\_file;

input\_file.open(input\_file\_path);

if(input\_file.is\_open()) // Loop used to call the subroutine for input of data.

{

while(getline(input\_file,input\_file\_line))

{

cout<<encodeCaesarCipher(input\_file\_line,shift,key)<<endl;

}

input\_file.close();

}

else

{

cerr<<"File does not exist in the given path"; // Error message.

exit(EXIT\_FAILURE);

}

}

string encodeCaesarCipher( string str, const int& shift, const string& key )// Subroutine to take the input data fro the user.

{

string new\_input\_file\_line=""; // Declarations for the subroutine.

string each\_character="";

for(int index\_of\_chars=0;index\_of\_chars<int(input\_file\_line.length());index\_of\_chars++) // Loop for the alignment of the input file.

{

each\_character=new\_position(input\_file\_line[index\_of\_chars],shift,key);

new\_input\_file\_line=new\_input\_file\_line.append(each\_character);

}

return new\_input\_file\_line;

}

int new\_position( const char& c, const int& shift, const string& key )

string alphacheck = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";

int finalvaluetoreturn = 0;

int totalShift = 0;

cout<<endl<<shift<<" is the shift"<<endl;

cout<<key<<" is the key"<<endl;

int Value\_ASCII = 0 ; // Declarations.

int i=0;

while(i<alphacheck.length()){

if(isalpha(c)){

if(toupper(c) == alphacheck[i])

{

char findme=key[i];

int j=0;

while(!(key[i]==alphacheck[j]))

{

j++;

}

totalShift = i - j;

cout<<totalShift<<" is the needed value asdasdasdadasdasd";

}

i++;

}

}

totalShift = totalShift + shift;

if(isalpha(c)){

if(isupper(c)){

Value\_ASCII = totalShift + 65;

}else{

Value\_ASCII = totalShift + 97;

}

}

int j=0;

if(isalpha(ch)) // Loop to check the values are alphabets.

{

if(totalShift>=1) // Loop to check and shift the position.

{

if(isupper(ch)) // Loop to check the case of the value.

{

if(Value\_ASCII+totalShift>90) // Loop if value is in ascii range.

{

Value\_ASCII=64+(Value\_ASCII+totalShift-90)%26;

}

else if(Value\_ASCII+totalShift<90) // Loop if value is in ascii range.

{

j=1;

}

}

else

{

if(Value\_ASCII+totalShift>122) // Loop if value is upper case alphabet.

{

Value\_ASCII=96+(Value\_ASCII+totalShift-122)%26;

if(Value\_ASCII<97)

{

Value\_ASCII=122;

}

}

else if(Value\_ASCII+totalShift<122) // Loop if value is lower case alphabet.

{

j=1;

}

}

}

else if(totalShift<0)

{

if(isupper(ch))

{

if(Value\_ASCII+totalShift<65)

{

Value\_ASCII=91+(Value\_ASCII+totalShift-65)%26;

}

else if(Value\_ASCII+totalShift>65)

{

j=1;

}

}

else // Loop to shift the value.

{

if(Value\_ASCII+totalShift<97)

{

Value\_ASCII=123+(Value\_ASCII+totalShift-97)%26;

}

else if (Value\_ASCII+totalShift>97)

{

j=1;

}

}

}

}

if(j==1){

Value\_ASCII=Value\_ASCII+totalShift;

}

return Value\_ASCII;

}

int main()

{

int shift=0;

int i=0;

while(i<5)

{

cin>>shift;

cin>>key;

process\_infile(shift,key);

cout<<endl;

i++;

}

return 0;

}