#include<stdio.h>

#include<conio.h>

void main()

{ float x[100],y[100],a,s=1,t=1,k=0;

int n,i,j,d=1;

printf("\n\n Enter the number of the terms of the table: ");

scanf("%d",&n);

printf("\n\n Enter the respective values of the variables x and y: \n");

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

{ scanf ("%f",&x[i]);

scanf("%f",&y[i]);

}

printf("\n\n The table you entered is as follows :\n\n");

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

{ printf("%0.3f\t%0.3f",x[i],y[i]);

printf("\n");

}

while(d==1)

{ printf(" \n\n\n Enter the value of the x to find the respective value of y\n\n\n");

scanf("%f",&a);

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

{ s=1;

t=1;

for(j=0; j<n; j++)

{ if(j!=i)

{ s=s\*(a-x[j]);

t=t\*(x[i]-x[j]);

}

}

k=k+((s/t)\*y[i]);

}

printf("\n\n The respective value of the variable y is: %f",k);

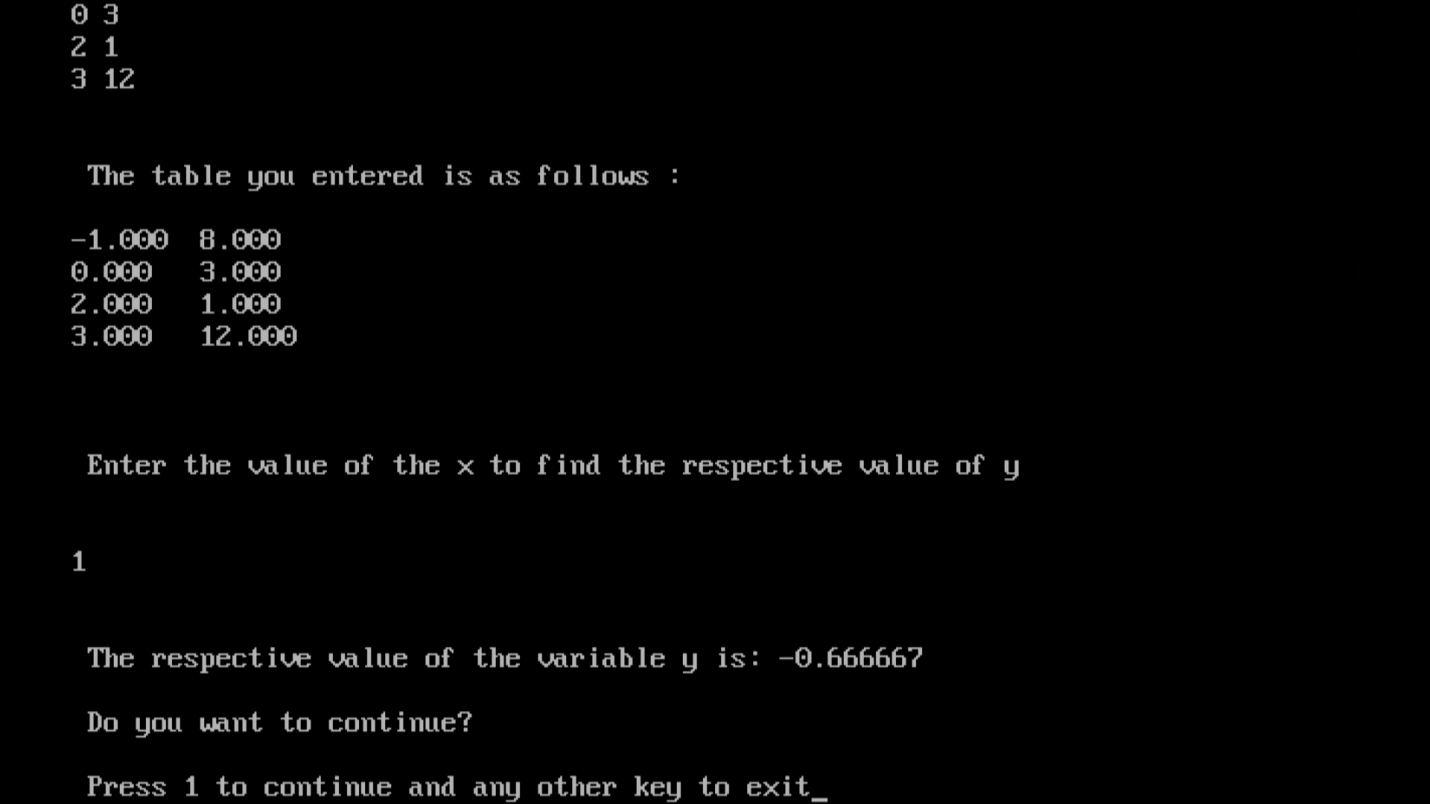
printf("\n\n Do you want to continue?\n\n Press 1 to continue and any other key to exit");

scanf("%d",&d);

}

getch();

}

****