Q3

#include <stdio.h>

#include <stdlib.h>

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Program: midtermq3.c

date: 14/10/2021

by : Mike Mico

purpose: swap value adress

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**void** main()

**void** swap(**int**\* x,**int**\* y);

**void** main()

{

**int** x=10;

**int** y=20;

swap(&x,&y);

printf("x is %d y is %d",x,y);

**return** 0;

}

**void** swap(**int**\* x,**int**\* y)

{

**int** xpointer=\*x;

\*x=\*y;

\*y=xpointer;

**return** 0;

}

Q4

#include <stdio.h>

#include <stdlib.h>

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Program: midtermq3.c

date: 14/10/2021

by : Mike Mico

purpose: swap value adress

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**void** main()

{

**double** length,width,height;

**double** ductTape;

printf("enter the length of box \n");

scanf("%lf",&length);

printf("enter the width of box \n");

scanf("%lf",&width);

printf("enter the height of box \n");

scanf("%lf",&height);

ductTape=(4\*length)+(4\*width)+(4\*height);

printf("you need %lf cm of ductTtape \n",ductTape);

**return** 0;

}

Q5.

#include <stdio.h>

#include <stdlib.h>

#include <Math.h>

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Program: midtermq5.c

date: 14/10/2021

by : Mike Mico

purpose: table with squares of a number

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**int** main()

{

**int** count=0;

**int** givenNum;

**int** lowPerfect,upperPerfect;

**double** lowRoot,upperRoot,actualRoot;

**double** num;

**int** list[10];

**do**

{

printf("enter integer number \n");

scanf("%lf",&num);

**if** (sqrt(num)-(**int**)sqrt(num) >0.0)

{

**if**(num<1000 || num>10)

{

count++;

list[count]=(**int**)num;

}

}

}**while**(count<10);

printf("given number | lower perfect square | upper perfect square || lower integer root| upper intenger root |actual root");

**for**(**int** i=0;i<10;i++)

{

givenNum=list[i];

lowRoot=sqrt(givenNum);

upperRoot=lowRoot+1;

lowRoot=(**int**)lowRoot;

upperRoot=(**int**)upperRoot;

lowPerfect=lowRoot\*lowRoot;

upperPerfect=upperPerfect\*upperPerfect;

actualRoot=sqrt(givenNum);

printf("%12d| %19d %19lf || %.2lf %19.2lf | %.4lf /n",givenNum,lowPerfect,upperPerfect,lowRoot,upperRoot,actualRoot);

}

}

Q6

#include <stdio.h>

#include <stdlib.h>

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Program: midtermq6.c

date: 14/10/2021

by : Mike Mico

purpose: integral

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**double** forwardRule(**double** a, **double** b ,**int** n);

**double** backwardRule(**double** a, **double** b ,**int** n);

**double** trapazoidalRule(**double** a, **double** b ,**int** n);

**int** main()

{

printf("Hello world!\n");

**return** 0;

}

**double** f(**double** x)

{

**return** 0;

}

**double** forwardRule(**double** a, **double** b ,**int** n)

{

**double** result,h;

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

{

h=(b-a)/n;

result+=h\*a;

}

**return** result;

}

**double** backwardRule(**double** a, **double** b ,**int** n)

{

**double** result,h;

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

{

h=(b-a)/n;

result+=h\*b;

}

**return** result;

}

**double** trapazoidalRule(**double** a, **double** b ,**int** n)

{

**double** result;

result=(forwardRule(a,b,n) + backwardRule(a,b,n))/2;

**return** result;

}