Assignment -1-

Introduction to programing with c

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1-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int num1=0;

int num2=0;

int result=0;

printf("Enter your numbers : ");

scanf("%d %d",&num1,&num2);

result=((num1+num2)\*3)-10 ;

printf("Result = %d\n",result);

return 0;

}

A computer screen with text on it

Description automatically generated

2-

#include <stdio.h>

#include <stdlib.h>

int main()

{

printf("my name is ahmed\n my grade is B");

return 0;

}

A computer screen with white text

Description automatically generated

3-

#include <stdio.h>

#include <stdlib.h>

int main()

{

float f=0.0;

float c=0.0;

printf("Enter temperature in c : ");

scanf("%f",&c);

f= c\*9/5+32;

printf("Temperature in f =%f\n",f);

return 0;

}

A screenshot of a computer

Description automatically generated

4-

#include <stdio.h>

#include <stdlib.h>

int main()

{

float r=0;

float area=0;

float circ=0;

float pi=3.1415;

printf("Enter circle radius : ");

scanf("%f",&r);

area=pi\*(r\*r);

circ=2\*pi\*r;

printf("Area of circle =%f\n Circumference of circle =%f\n",area,circ);

return 0;

}

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5-

#include <stdio.h>

#include <stdlib.h>

int main()

{

char x;

printf("Enter character :");

scanf(" %c",&x);

printf("ASCII =%d\n",x);

return 0;

}

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6-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int x=0;

int y =0;

printf("Enter numbers :");

scanf("%d %d",&x,&y);

if(x>y){

printf("Not equal\n");

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

}

else if(x<y){

printf("Not equal\n");

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

}

else

printf("Equal\n");

return 0;

}

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7-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int x=0;

int y =0;

int z=0;

printf("Enter numbers :");

scanf("%d %d %d",&x,&y,&z);

if(x<y && x<z){

printf("the smallest is %d\n",x);

}

else if(y<x && y<z){

printf("the smallest is %d\n",y);

}

else

printf("the smallest is %d\n",z);

return 0;

}

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Description automatically generated

8-

#include <stdio.h>

#include <stdlib.h>

#include <math.h>

int main()

{

int x;

double y;

printf("Enter number to check : ");

scanf("%d",&x);

y=sqrt(x);

x=sqrt(x);

if(x==y){

printf("Yess");

}

else{

printf("No");

}

return 0;

}

A screenshot of a computer program

Description automatically generated

9-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int grade =0;

printf("Enter your grade:");

scanf("%d",&grade);

if(grade>=50 && grade<65){

printf("pass");

}

else if (grade>=75 && grade<85){

printf("very good");

}

else if (grade>=65 && grade<75){

printf("good");

}

else if (grade>=85 && grade<100){

printf("excellent");

}

else if (grade>100 || grade<0){

printf("range from 0 to 100");

}

else

printf("fail");

return 0;

}

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10-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int x=0;

int y=0;

int sum=0;

char ope;

printf("enter your numbers ");

scanf("%d %d",&x,&y);

printf("enter your operation \n");

scanf(" %c",&ope);

if(ope=='/' && y==0){

printf("zero is not valid");

};

switch(ope)

case '+':

sum=x+y;

printf("%d",sum);

break;

case '-':

sum=x-y;

printf("%d",sum);

break;

case '\*':

sum=x\*y;

printf("%d",sum);

break;

case '/':

sum=x/y;

printf("%d",sum);

break;

}

return 0;}

A screenshot of a computer program

Description automatically generated

11-

#include <iostream>

using namespace std;

int main()

{

int sum=0;

for(int i=0;i<=100;i++){

sum+=i;

}

printf("%d",sum);

return 0;

}

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Description automatically generated

12-

#include <stdio.h>

#include <stdlib.h>

int main()

{

unsigned int x=0;

int factorial=1;

printf("Enter number\n");

scanf("%d",&x);

for(int i=1;i<=x;i++){

factorial\*=i;

}

printf("%d",factorial);

return 0;

}

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Description automatically generated

13-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int x=0;

int flag=1;

printf("Enter number :");

scanf("%d",&x);

for(int i=2;i\*i<=x;i++){

if(x%i==0){

flag=0;

}

else{

flag=1;

}

}

if(flag==0 || x==0 || x==1){

printf("not prime");

}

else{

printf("prime");

}

return 0;

}

A screen shot of a computer

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14-

#include <stdio.h>

#include <stdlib.h>

int main()

{

for(char i='A';i<='Z';i++){

printf(" %c\n",i);

}

return 0;

}

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Description automatically generated

15-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int num=0;

int power=0;

int result=1;

printf("Enter number\n");

scanf("%d",&num);

printf("Enter power\n");

scanf("%d",&power);

while(power!=0){

result\*=num;

power--;

}

printf("%d",result);

return 0;

}

A screen shot of a computer

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16-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int num=0;

int last=0;

int ans=0;

int size=0;

printf("Enter the number of digits : ");

scanf("%d",&size);

printf("Enter the number : ");

scanf("%d",&num);

while(size!=0){

last=num%10;

ans=ans\*10+last;

num=num/10;

size--;

}

printf("%d",ans);

return 0;

}

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17-

#include <stdio.h>

#include <stdlib.h>

int main()

{

int x=0;

int count=0;

printf("Enter number : ");

scanf("%d",&x);

if(x==0){

count=1;

}

else{

while(x!=0){

x=x/10;

count++;

}

}

printf("number of digits = %d",count);

return 0;

}

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18-

#include <stdio.h>

#include <stdlib.h>

int main()

{

for(int i=0;i<=5;i++){

for(int j=0;j<=i;j++){

printf("\*");

}

printf("\n");

}

return 0;

}

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Description automatically generated

19-

#include <stdio.h>

#include <stdlib.h>

int main()

{

for(int i=5;i>=0;i--){

for(int j=0;j<=i;j++){

printf("\*");

}

printf("\n");

}

return 0;

}

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20-

#include <stdio.h>

#include <stdlib.h>

int main()

{

for(int i=1;i<=5;i++){

for(int s=1;s<=5-i;s++){

printf(" ");

}

for(int j=1;j<=2\*i-1;j++){

printf("\*");

}

printf("\n");

}

return 0;

}

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Description automatically generated