

**All LABs cods from 1 15**

**SUBJICT: pf**

**By**

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# Lab No 1

Task no : 1

1 \* Header Files \*/ 2 #include< stdio.h>

1. #include< conio.h>
2. main ()

5 {

1. int length = 0, breadth = 0;
2. int area = 0; |
3. printf ("Enter the length and breadth of a rectangle"); 9 scanf ("% d % d", & length, & breadth);
4. area = length \* breadth;
5. printf ("Area of the Rectangle: % d", area); 12 getch ();

13}

14

Task no : 2

1/ Header Files \*/

1. #include< stdio.h>
2. #include< conio.h>
3. #define PI 3.147
4. main ()

6 {

float radius =;

1. float area = 0, circumf = 0; ||
2. printf ("Enter the radius of the Circle"); scanf ("% f", & radius);

11 area = PI \* radius \* radius; 12 circumf = 2 \* PI \* radius;

13 printf ("\ nArea of the Circle: % f\ n", area); printf ("Circumference of the Circle: % f", circumf); 15 getch ();

16}

17

# Lab No 2

Task no: 1

3 # include< stdio.h> 4 int main ()

5

Сл

1. 6 int a, b, sum;
2. printf ("\ n enter two no:"); 8 scanf ("% d % d", & a, & b); 9
3. sum = a + b;
4. printf ("sum; % d", sum); 12 return (0);

13

Task no:2

3 #include< stdio.h> 4 int main ()

5

1. int lenth, breadth area;
2. printf ("\ n enter the length of rectangle:"); 8 scanf ("% d", & lenth);

9 printf ("\ n enter the breadth of rectangle:"); 10 scanf ("% d", & breadth);

1. area = lenth + breadth;
2. printf ("\ n area of rectangle: $ d, area"); 13 return (0):

14}

Task no: 3

3 #include< stdio.h>

4. int main () 5 {

1. int rad;
2. float pi = 3.14, area, ci;
3. printf ("\ n enter radius of circle:"); 9 scanf ("% d", & rad):

10 area = pi \* rad \* rad;

1. printf ("\ n enter radius of circle: % f", area); 12 ci-2 \* pi \* rad;
2. printf ("ncircumf rence: % f", ci); 14 return (0);

15}

# Lab No: 3

Task no : 1

1 #include< stdio.h> 2 int main ()

3

1. int num;
2. printf ("Input a number:"); 6 scanf ("% d", & num);

if (num> = 0)

printf ("% d is a positive number\ n", num); 9 else

10 printf ("% d is a negative number\ n", num); 11

Task no : 2

1 #include< stdio.h> void main ()

39 {

4 int num1, rem1; 5

6 printf ("Input an integer:"); 7 scanf ("% d", & numl);

8 rem1 = num1 % 2;

9 if (rem1 == 0)

10 printf ("% d is an even integer\ n", num1); 11 else

12 printf ("% d is an odd integer\ n", num1);/ 13}

Task no : 3

1 #include< stdio.h> int main ()

30

4 int sidea, sideb, sidec; // are three sides of a triangle 5 // Reads all sides of a triangle

1. printf ("Input three sides of triangle:");
2. scanf ("% d % d % d", & sidea, & sideb, & sidec);
3. if (sidea-ssideb && sidebaasidec) // check whether all sides are equal

9 {

10 printf ("This is an equilateral triangle. In"); 11}

12 else if (sidear-sideb Il sidebarsidec Il sidecassidea) // check whether two sides are equal

13 {

14 printf ("This is an isosceles triangle.\ n"); 15 1

16 else // check whether no sides are equal

17 {

18 printf ("This is a scalene triangle.\ n"); 19}

20 return 0; 1

21

# Lab No : 4

Task no : 1

1 #include< stdio.h> 2 int main ()

180

30

1. int numA;
2. int numB;
3. int numc;
4. St
5. printf ("Enter three numbers:");
6. scanf ("% d % d % d", & numA, & numB, & numC); Fi 10

Er

11 0 if (numA> numB) { 12 if (numA> numc)

13 printf ("% d is the largest number.", numA); 14 else

15 printf ("% d is the largest number.", numc); 16}

1. else {
2. if (num> numc)
3. printf ("% d is the larget number.", numB); 20 else

21 printf ("% d is the largest number.", numC); 22}

23 return 0;

24}

25

Task no : 2

1 #include< stdio.h> 2 int main ()

1. a {int marks;
2. printf ("Enter your marks"); 5 scanf ("% d", & marks);

6 if (marks< 0 11 marks> 100)

7 {

8 printf ("Wrong entery"); 9}

10 else if (marks< 50)

11 {

12 printf ("Grade F"); 13}

14 else if (marks> = 50 && marks< 60)

15 {

16 printf ("Grade D"); 17}

18 else if (marks> = 60 && marks< 70)

19 {

20 printf ("Grade C"); 21}

1. else if (marks> = 70 && marks< 80)
2. 白{
3. printf ("Grade B"); 25 上}

26 else if (marks> = 80 && marks< 90)

27 {

28 printf ("Grade A"); 29}

30 else if (marks> = 90)

31 {

32 printf ("Grade A +"); 33} return 0;

34

# Lab No : 5

Task no : 1 1

#include<stdio.h> 2

int main() 3

int T

for (T-2T<=7;T++)

{ 5

6

printf("TAYYEB ULLAH/n", T); printf("20MDELE201/n", T) ; 8

9

10

11

12

printf("/n"); 13

Task no : 2 #include <stdio.h int main()

3

int i

printf("The first 10 psitive integer are: In") for (i-1;ic=10; i++)

7

printf(d ",i)s

printf("\n") 11

10

Task no : 3 #include <stdio. h> int main()

int i,f-1, num;

printf("Enter a number: ") s scanf("%d", &num)

for (i-1ic=num;i++) f-f"i

10

11

printf("Factorial of %d is: šd", num, f)s

return 0

13

# Lab No : 6

Task no : 1 #include<stdio .h> #include<conio . h> int main()

4

int a,bj int ops

printf(" 1.Addition/n 2.Subtraction/n 3.Multiplication/n 4.Division/n")

printf("Enter the values of a & b:") scanf("%d Sd",8a,8b); printf("Enter Your Choice ") scanf("d", 8op)

switch(op) 11

13

14

case 1 :

15

printf("Sum of d and d is: d",a,b,a+b); break

16

17

Case 2:

printf("Difference of Nd and d is : d",a,b, a-b)s breaks

8

19

case 3:

printf("Multiplication of Sd and Sd is : d",a,b, a"b) s break

case 4:

printf("Division of Two Numbers is d "a/b)s breakj

defaull

printf("Enter Your Correct Choice. ")

break 20

28

return 0

Task no : 2 #include <math.h> #include <stdio.h> int main()

4

double 8, b, C discriminant, rootl, root2, realPart, imagParts

printf("Enter coefficients a, b and c ") scanf("8Tf \*If AIf°, Ra, Bb, &c) discriminant b b 4 \*a c

11

if (discriminant > e) {

oot1 (-b sqrt(discriminant)) / (2\* a)

root2 (-b sqrt(discriminant) ) (2 a)

printf("root1 %.21f and root2 - %.216", rootl, root2) else if (discriminant 8)

rootl root2-b I (2 "a)s

printf("root1 root2- %.2145", root1)s I if roots are not real

else

ealPart = -b / (2 a)

imagDart sgrt (-discriminant) (2 \*)

printf(root1 %.21f-%.21fi and root2 - %.2f-%.2fi", realPart, imagPart, realPart, imagPart);

return 8

Task no : 3 3main()

Int choicej

printf("Enter/n1 to find area of Triangle/n2 for finding area of Square/n3 for finding area of Circle/a")

Scanf ("d",8choice)s switch(choice) { case 11(

int a,b,€

floet s,aresj

printf("Enter sides of triangle/n") scanf("dsd sd",la, &b,&c)s

s-(float) (abc)/2

area (float) (sqrt (s\*(5-a)"(s-b)"(s-c))) printf("Area of Triangle is sf/n", area) break

15

case 2

float side, areaj

printf(Enter sides of Square/n")s scanf("",8side)s

aree(1loat) side "sides printf(Area of square is Sf/n")j break

case

float radus s of Circle/n")s print(Enter Radius of Circle/n") scanff ,åradius)

area-(loat)3.14159 radius"radiusj printf("Area of Circle Sf/n,area) break

default:

printf(Invalid Choice/n") break

# Lab No : 7

Task no : 1 Finclude <stdio.h> int main()

int a,b,fac-b 1 printf("TAYYEB ULLAH/n")

printf("Enter The Number/n") scanf("%d", 8a)s

while (b<=a) fac fac"b b++

11

12

printf("The Factorial of d is Kd/n",a, fac)s

Task no : 2

#include <stdio.h> int main()

int a-15 while(a>e)

printf ("%d--",a)s a--

int b a+1; while (b>@) 10

11

12

printf("\*") b--

13

14

15

16

printf("/n")s 17

18

return e 20

# Lab No : 8

Task no : 1 #include <stdio.h int main()

int a,b-1

printf("TAYYEB ULLAH.. 20MDELE201/n") ; 7

printf("Enter The Value For Addition/n'") scanf("%d",8a)s

b+aj 18

11

uhile (al -e) 12

13

printf("The Sum 0f All Number is d",b)) 14

Task no : 2 #include <stdio.h> #include <conio.h> int main)

4

3

int a,b,HCF, LCM, i

printf("TAYYEB ULLAH. . 20MDELE201/n")

printf("Enter The 1st Number/n Enter The 2nd Number/n")

scanf("%d d",8a,8b) for(i-1; i=aj i++)

10

11

if(ai--0 &8 bi--0) 14

HCF i 15

16

LCM-(a"b)/HCF

printf("HCF %d and LCH d", HCF, LCM)D 17

18

# Lab No : 9

Task no : 1 #include <atdio.h> int main ()

printf("size of int data type printr ("s1ze or tloat data typPe

printf ("size of double data type td \n",sizeof (double) ) ; t d n", sizeof (int) )

t d n", sizeof (float)))

printf ("size of char data tYpe printf ("size of long data type d n", sizeof (char) )

t d \n", sizeof (long) )

Task no : 2 #include <stdio.h> #include <conio.h> int main ()

char ch;

printf ("Enter your number\n") acanf (c", &ch) ;

printf ("ASCII value of tc d", ch, ch) : 5

9

10

11

Task no : 3 #include <stdio.h> #include <string.h> int main ()

4

char ch [100] int i

printf ("Enter the string in lowercase ln") gets (ch)

printf ("String in lowercase s In", ch); for (1-0; ch[i]:i++)

if (ch [i]>=97 &6 ch[i]<=122) ch [i-32

printf("String in uppercase s \n", ch); return 0:

# Lab No : 10

Task no : 1 #include <atdio.h> #include <conio.h> int main ()

int x,y

printf ("Enter the value of x \n"): scanf ("d", 6x);

printf ("Enter the value of y \n"):l scanf ("d", sy);

int temp=x; y-temp:

print ("Atter swaping x-d, y=td", x, y) return 0;

Task No : 2 #include <stdio.h> #include <conio.h> int display (int a)

3

4

int main () 5

6

int a,c;

printf ("Enter the number \n"); scanf ("\*d", ta) ;

c display (a) ; printt ("c- sd",c); 9

10

return 0:

13

int display (int a)

14 E

15

int nu;

16

nu = (a) return nu:

# Lab No : 11

Task No : 1

1 #include<stdio.h>

Enter the

int greater (int, int); void main ()

4

Enter the The great Process ex int X,Y,Z

printf(" Enter the First number: ") scanf("d", &X);

printf("\n Enter the second number: ") scanf("d",&Y);

Z=greater(X, Y);

printf("n The greater number is: d ,Z); Press any

11

13

14 int greater(int A, int B) 15

if(A>B)

return A else

16

17

18

return B

Task No : 2

1#include < stdio . h> 2 int main ()

float fh,clj int choice;

printf("n Press 1 to Convert temp fron Fahrenheit to Celsius") ;

printf("\n Press 2 to Convert temp fron Celsius to Fahrenheit").

printf("\n\n Enter your choice: ") scanf("xd",schoice) ; if(choiceus1)

printf(n Enter temp in Fahrenheit : "); scanf("%f,8fh);

cl-(fh-32)/1.8;

printf(" Tenp in Celsius is: X.2fr",cl); else 1f(choice==2)

printf("n Enter the temp in Celsius : ") scanf"",8cl);

fh=(cl\*1.8)+32;

printf(" Temp in Fahrenheit is: %.2f", fh);

public int cdec2 printt (canst char estrict Forat,- else

printf("n Invalid value") return 0

# Lab No : 12

Task No : 1

1 #include<stdio .h> void main ()

3

2

int arr[5]={1,2,3,4, 5};

int i

for(i-e, i<5; i) 9

printf(" Element of array is: Kd\n", arr[i]) ; 11

Task No : 2 #include<stdio . h> #define MAX\_SIZE 10 void main ()

int arr[MAX\_SIZE] int i,n, sum=0;

printf(" Enter the size of array: "); scanf(" Xd", &n);

printf("n Enter elements in an array: %d \n\n",n); for(i-0; i<n; i++)

printf(" Element of array: ") scanf("d",8arr[i]) sum=sum+arr[i];

printf("\n sum of array elements : %d", sum);

# Lab No : 13

Task No : 1 sinclude <iostream

int search (int arr[0, int key, int flag) int is

for (i- es ie key i) if(arr[i]--flag) return-1

drive code int main (voi 14

13

int arr[ -{2,3,4, 10,40)

int flags

printf(write the key") scanf("%d",8flag) ;

int key-sizeof (arr) / sizeof(arr[e])» I1 function call

Task No : 2 include <stdio.h>

#include <stdlib.h> int main

int 4,lo,high,id, n, key,array[100 printf(enter number of elements scanf ("Xd,8n)3

printf(enter d integers",n) for(ie icng i scanf("Nd,Rarray[i] printf("enter value to findin") scanf(d,8key)

low highn-1

id-(1lowhigh)/2 hile (1ow c~ high f(array[=id] <key low-mid 1

else if (array[mid] --key)

printf(d found at location Nd\n",key,mid- 1)s break

else highmid-1

id -(low high)/2 (lowhigh)

printf(Not found! Sd is not present in the listin",key) 32

# Lab No : 14

Task No : 1 #include<string.h> int main()

4

int i,j,len, count-@

char vowel[]-{"aeiouAE IOU"} char str[30]

printf( Enter a string : ") scanf("%s",8str) ; printf("n String is: %s",str) len-strlen (str) ;

printf(in Lenght of the string is: d",len) ; 9

10

11

12

13

for(i-0 ic10; i) 15

16

for (j-0 jelen; j+\*) 17

18

if(str[i]-=vowel[i]) count-count+1 19

20

intf("\n vowels in your string are: d", count); return 0

24

25

26

27

Task No : 2 #include<stdio . h> #include<string.h> int main()

int i,j

char str[ 20]l

printf(" Enter a string: ")j gets(str)s

j-strlen(str); for(i-0; i<j/2; i) 1e

if(str[i] l=strlj-i-1])

printf("n This is not a palindrome: ") break

14

16

if(i-j/2)

printf("n This is a palindrome: ") 17

Task No : 3 #include <stdio . h> void main()

3

int i

char str[30]

printf(" Plz Enter a string: ")s gets(str)

for(i-e str[i]!- "\e's i\*) 10

if(str[i]>-65 8& str[i]c-90) str[i]-str[i]+32

else if(str[i]>-97 8& str[i]«-122) str[i]-str[i]-325

12

13

15

16

printf("n The alternate case of string is: %s\n", str);

# Lab No : 15

Task No : 1

1 #include <stdio. h int main()

2

3

int a,\*p; a=7;

p-&a

\*p 5

printf( "ADDRESS OF NUMBER: %d\n", \*p); printf("ORIGINAL VARIABLE NUMBER IS %d:\n",a);

} 10

Task No : 2 #include <stdio.h> int main()

3

2

int a,\*P a=7;

p &a;

printf("variable is: %d\n",a);

printf("ORIGINAL address of VARIABLE is %d: \n",p); 4

6

7

8

9

Task No : 3

1 #include <stdio.h> int main()

2

3

int ptr\_a;

char name [30];

printf("enter your name \n"); gets (name);

ptr\_a=&name;

printf("NAME IS %s \n", name); printf("adress of name:%u", ptr\_a) ; 4

5

6

8

9

10

11