C SET 4

1)

#include <stdio.h>

int main() {

int a, b, x, y, gcd, lcm;

printf("Enter two integers"\n);

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

a = x;

b = y;

while (b != 0) {

t = b;

b = a % b

a = t;

}

gcd = a;

lcm = (x\*y/gcd;

printf("GCD of %d and %d = %d\n", x, y, gcd);

printf("LCM of %d and %d = %d\n", x, y, lcm);

return 0;

}

Ans:

(i) didn’t declare t

(ii) in printf(“…….\n”); \n should be inside quotes

(iii) missing , in scanf(“…..”, &x , &y);

(iv) missing ; after that is b = a % b;

(v) missing ) in lcm = (x\*y)/gcd;

**2)**

#include <stdio.h>

void main()

{

int a,i,n=5;

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

{

Printf("\nENTER THE NUMBER- %d: ",i+1);

scanf("%d",&a[i]);

}

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

Printf("ARRAY ELEMENT-%d: VALUE=%d, ADDRESS=%u\n", i+1, a[i],&a[i])

}

**ans)**

(i) declare a aa array that is int a[10]

(ii) no ; after i++ in for(i=0;i<n;i++;)

(iii) small p in Printf(“….”);

(iv) small p in Printf(“…..”);

(v) missing ; after printf(“….”)

3)

#include <stdio.h>

#include <conio.h>

void main()

{

char s;

int len,i;

printf("\nENTER A SENTENSE: ");

get(s);

len=len(s);

printf("\n");

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

{

if(s[i]>=65) && if(s[i]<=90)

printf("%c",s[i]+32);

else

printf("%c",s[i]);

}

getch;

ans)

(i) in printf("b = %d\n"\n, b); **\n should be inside quotes**

(ii) redeclaration of a that is int a=20;

(iii) near printf("Outer a = %d\n", a); **No a is found to be declared**

(iv) in func\_1() definition. No a is found.

(v)in func\_2() definition. In printf(“….”) there is ;

**4)**

#include <stdio.h>

#include <conio.h>

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

void main()

{

int a=10,b=20;

Swap(&a,&b);

printf("\nVALUES OF a AND b AFTER SWAPING ARE %d %d ,\*a,\*b);

getch();

}

void swap(& x,& y)

int \*x,\*y;

{

int t;

t=\*x;

\*x=\*y;

\*y=t;

}

Ans)

(i) No type Integer

(ii) calling func\_1() before defining. Conflicting types

(iii) callinh func\_2() in main()

(iv) small s in Static

(v) printf(“…….”,b) closing quotes

5)

#include <stdio.h>

#include <conio.h>

#include <malloc.h>

struct linklist

{

int number;

struct linklist next;

}

typedef struct linklist node;

void create(node \*);

void count(node \*);

node \*head;

void main()

{

head=malloc(sizeof(node));

create(head);

printf("\n");

count(head);

getch();

}

void create(node \*list)

{

char conf='y';

int i;

printf("\nENTER A NUMBER: ");

scanf("%d",&list->number);

printf("\nWANT TO CONTINUE[Y/N]: ");

conf=getche();

printf("\n");

if(conf=='n' || conf=='N')

list->next=NULL;

else

{

list->next=(node)malloc(sizeof(node));

create(list->next);

}

}

void count(node \*first)

{

int i=0;

while(first!=NULL)

{

first=first->next;

i++;

}

printf("THERE ARE %d NODES IN THE LINK LIST",i);

}

Ans:

(i) ; after struct{ }

(ii)\* missing in struct { struct linklist \*next;}

(iii) \* missing in else, list->next=(node \*)malloc(sizeof(node));

Ans:

(i) int visited[10]= {0}

(ii) cost should be declared as array first that is int cost[20][20]; instead of int cost;

(iii) for (i=1,min=999;i<=n;i++). Not semicolon after i=1

**6)**

#include<stdio.h>

#include<conio.h>

int a,b,u,v,n,i,j,ne=1;

int visited[10]= 0,min,cost,mincost=0;

void main() {

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

scanf("%d",&n);

printf("\n Enter the adjacency matrix:\n");

for (i=1;i<=n;i++)

for (j=1;j<=n;j++) {

scanf("%d",&cost[i][j]);

if(cost[i][j]==0)

cost[i][j]=999;

}

visited[1]=1;

printf("\n");

while(ne<n) {

for (i=1;min=999;i<=n;i++)

for (j=1;j<=n;j++)

if(cost[i][j]<min)

if(visited[i]!=0) {

min=cost[i][j];

a=u=i;

b=v=j;

}

if(visited[u]==0 || visited[v]==0) {

printf("\n Edge %d:(%d %d) cost:%d",ne++,a,b,min);

mincost+=min;

visited[b]=1;

}

cost[a][b]=cost[b][a]=999;

}

printf("\n Minimun cost=%d",mincost);

getch();

}

Ans:

(i) int visited[10]= {0}

(ii) cost should be declared as array first that is int cost[20][20]; instead of int cost;

(iii) for (i=1,min=999;i<=n;i++). Not semicolon after i=1