Solution of work sheet (1) oop

Prepared by

Ahmed munem hussein aljubori

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```cpp
Q6
#include<iostream.h>
void main(){
int const i=6;
int a[i],sum=0;
for (int l=0;i< 1;l++)
{
sum+= l;
cout<<"the sum"<<":"<<sum<<" \n";
}
for (l=7;l>=2;l--)
{
cout<<l<<endl;
}}
```

Q 9
```cpp
#include<iostream.h>
void main(){              //secondary digonal==0
int a[3][3],i,j;
for(i=0;i<3;i++){
for(j=0;j<3;j++)
cin>>a[i][j];}
for(i=0;i<3;i++){
for(j=0;j<3;j++){
if(i+j==2)
cout<<"0"<<'\t';
else
cout <<a[i][j]<<'\t';}
cout<<'\n';
}}
```

```
Q3
# include<iostream.h>
int fab(){
int a=0,b=1,c,n;
 c=a+b;
 cin>>n;
cout<<a<<"    "<<b<<"    "<<c<<"    ";
 while(c<n)
{
a=b;b=c; c=a+b;
cout<<c<<"    ";
}  }
 main()
{
fab();
}
```

Q4

```cpp
#include<iostream.h>
void main( )
{
int i=1,c=1;
int b;
cin>>b;
for(int a=1;a<=b;a++){
while(i<=a){
c=c*i;
i++;
}}
cout<<"factorial = "<< c<<endl;
}
```

Q5

```cpp
#include<iostream.h>
#include<math.h>
int power(int i,int j){
int po;
po=pow(i,j);
return(po);
}
main(){
int a,b,s;
cin>>a>>b;
s=power(a,b);
cout<<s;
}
```

```cpp
Q13
#include<iostream.h>
 #include<string.h>
void main()
{
char s[]="ahmed munem hussain",x[]="    ";
cout<<"your string is: "<<s<<'\n';
for(int i=0;i<=13;i++)
cout<<s[i]<<'\n';
 }
```

```
Q7
#include<iostream.h>
#include<string.h>
#include<ctype.h>
void main(){
char s[]="aHmed muNem hUsSaIn";
for ( int i=0;i<19;i++)
{
 j=toascii(s[i]);
 if (j<97)
s[i]=tolower(s[i]);
else
 s[i]=toupper(s[i]) ;
 }
 cout<<s<<'\n';
 }
```

Q12

```cpp
#include<iostream.h>
void main(){
int a[3][3],i,j;
for(i=0;i<3;i++){
for(j=0;j<3;j++)
cin>>a[i][j];}
int min=a[0][0];
 for(i=0;i<3;i++){
for(j=0;j<3;j++)
 if(a[i][j]< min)
min=a[i][j]; }
 cout <<"the min :"<<min<<endl;
}
```

Q8
```cpp
#include<iostream.h>
void main()
{
int a[3][3],i,j,sum=0;
for(i=0;i<3;i++){
for(j=0;j<3;j++)
cin>>a[i][j];
}
for(i=0;i<3;i++){
for(j=0;j<3;j++)
cout<<a[i][j]<<" ";
cout<<'\n';
}
 for(i=0;i<3;i++){
 for(j=0;j<3;j++)
  if(a[i][j]%2!=0)
  sum=sum+a[i][j];}
  cout<<"\nsum= "<<sum;
}
```

Q16

```cpp
#include<iostream.h>
int main(){
int *x;
int *p,*q;
int c=100,a;
x=&c;
p=x+2;
q=x-2;
a=p-q;
cout<<"the address of x:"<<x<<'\n';
cout<<"the address of p after incrementing x by 2:"<<p<<'\n';
cout<<"the address of q after decrementing x by 2:"<<q<<'\n';
cout<<"the no of elements between p and q :"<<a<<'\n';
return (0);
}
```

Output:
the address of x:0x1a27246c
the address of p after incrementing x by 2:0x1a272470
the address of q after decrementing x by 2:0x1a272468
the no of elements between p and q :4

Q2

```cpp
#include<iostream.h>
int average(int );
void main(){
int av;  cin>>av;
cout<<average(av);  }
int average(int x)   {
int y;
if((x>=90)&&(x<=100))   y=4;
else if((x>=80)&&(x<=90))  y=3;
else if((x>=70)&&(x<=80))  y=2;
else if((x>=60)&&(x<=70))   y=1;
else
y=0;
return(y);
}
```

Q15
```cpp
#include<iostream.h>
 void main()
 {
  float a=3,c=4,sum=a+c,min=a-c,mul=a*c,div=a/c;
 float *p1,*p2,*p3,*p4;
 cout<<*(p1=&sum)<<'\n';
 cout<<*(p2=&min)<<'\n';
 cout<<*(p3=&mul)<<'\n';
 cout<<*(p4=&div);
 }
```

Q1

```cpp
#include<iostream.h>
#include<string.h>
int const size=20;
int upper(char[]);
void main(){
char str[size];
cout<<"enter your string:";
 cin.getline(str,size,'\n');
 cout<<upper(str);  }
 int upper(char a[]) {
 int count=0;
 for(int i=0;i<strlen(a);i++)
 if(a[i]>='A'&&a[i]<='Z')  count++;
 return(count);
 }
```