

WIPRO NLTH CODING ANSWERS – 30TH JAN MORNING SLOT

1. Toy Manufacturers

```
#include<stdio.h>

void mergeSort(int A[],int lb,int up)
{
    int mid;
    if(lb<up){
        mid = (lb+up)/2;
        mergeSort(A,lb,mid);
        mergeSort(A,mid+1,up);
        merge(A,lb,mid,up);
    }
}

void merge(int A[],int lb,int mid, int up)
{
    int i,j,k,b[up];
    i = lb;
    j = mid+1;
    k = lb;
    while(i<=mid&& j<=up)
    {
        if(A[i]<=A[j])
        {
            b[k] = A[i];
            i++;
        }
    }
}
```

```
        k++;

    }
    else
    {
        b[k] = A[j];

        j++;

        k++;

    }

}

if (i>mid)
{
    while(j<=up)
    {
        b[k] = A[j];

        j++;

        k++;

    }
}
else
{
    while(i<=mid)
    {
        b[k] = A[i];

        i++;

        k++;

    }
}
```

```

        for(i= lb;i<=up;i++)
        {
            A[i]=b[i];
        }
    }
int main(){
    int n,m;
    scanf("%d %d",&n,&m);
    int arr[n];
    int i;
    for(i = 0;i<n;i++){
        scanf("%d",&arr[i]);
    }
    mergeSort(arr,0,n-1);

    printf("%d",arr[m-1]);
}

```

2. BUY SELL GOODS CODE

```

#include <stdio.h>

int main()
{
    int i,j;
    char s1[100],s2[100],s3[100];
    scanf("%s %s", s1,s2);
    for(i=0,j=0;s2[i]!='\0';i++,j++)
    {

```

```
s3[j]=s2[i];
}
for(i=0;s2[i]!='\0';i++,j++)
{
s3[j]=s2[i];
}
s3[j]='\0';
j=0;
for(i=0;s3[i]!='\0';i++)
{
if(s3[i]==s1[j])
{
j++;
}
else
j=0;
if(s1[j]=='\0')
{
printf("1");
break;
}
}
if(s1[j]!='\0')
{
printf("-1");
}
return 0;
}
```

3. Charlie has a....code

```
#include <stdio.h>

int main()
{
    int i,j;

    char s1[100],s2[100],s3[100];

    scanf("%s %s", s1,s2);

    for(i=0,j=0;s2[i]!='\0';i++,j++)
    {
        s3[j]=s2[i];
    }

    for(i=0;s2[i]!='\0';i++,j++)
    {
        s3[j]=s2[i];
    }

    s3[j]='\0';

    j=0;

    for(i=0;s3[i]!='\0';i++)
    {
        if(s3[i]==s1[j])
        {
            j++;
        }
        else
        {
            j=0;
        }
        if(s1[j]=='\0')
        {
            printf("1");
        }
    }
}
```

```
break;
}
}
if(s1[j]!='\0')
{
printf("-1");
}
return 0;
}
```

4. Data encryption

```
#include <stdio.h>

int main() {
    int n,i;
    scanf("%d", &n);
    int a[10];
    for (i = 0; i < n; i++) {
        scanf("%d", &a[i]);
    }
    int sum=0;
    for (i = 0; i < n; i+=2) {
        sum+=a[i];
    }
    printf("%d",sum);
    return 0;
}
```

5. Magic mirror

```
#include <stdio.h>

int main()
{
    int i,j;

    char s1[100],s2[100],s3[100];

    scanf("%s %s", s1,s2);

    for(i=0,j=0;s2[i]!='\0';i++,j++)
    {
        s3[j]=s2[i];
    }

    for(i=0;s2[i]!='\0';i++,j++)
    {
        s3[j]=s2[i];
    }

    s3[j]='\0';

    j=0;

    for(i=0;s3[i]!='\0';i++)
    {
        if(s3[i]==s1[j])
        {
            j++;
        }

        else
            j=0;

        if(s1[j]=='\0')
        {
            printf("1");

            break;
        }
    }
}
```

```
}  
if(s1[j]!='\0')  
{  
    printf("-1");  
}  
return 0;  
}
```