QUESTION 5:CREATE ARRAY OF 1000 NO. AND INITIATE ARRAY WITH INDEX NO.CREATE 10 CHILD PROCESS. EACH CHILD PROCESS ADDS 100NO AND PARENT AT THE END ADDS UP THOSE 10 SUM VALUES AND GIVE OUTPUT?

ANSWER:

BY USING fork:

#include<stdio.h>

#include<unistd.h>

#include<stdlib.h>

#include<sys/wait.h>

int main(){

int a[1000],sum=0,a1[10];

int s1,s2,s3,s4,s5,s6,s7,s8,s9;

int v1=0,v2=0,v3=0,v4=0,v5=0,v6=0,v7=0,v8=0,v9=0,v10=0;

for(int i=0;i<1000;i++){

a[i]=i;

}

int cpid1=fork();

if(cpid1==0){

for(int i1=0;i1<100;i1++){

v1+=a[i1];

}

sum+=v1;

exit(sum);

}

else{

s1=-1;

wait(&s1);

int cpid2=fork();

if(cpid2==0){

for(int i2=100;i2<200;i2++){

v2+=a[i2];

}

sum+=v2;

exit(sum);

}

else{

s2=-1;

wait(&s2);

int cpid3=fork();

if(cpid3==0){

for(int i3=200;i3<300;i3++){

v3+=a[i3];

}

sum+=v3;

exit(sum);

}

else{

s3=-1;

wait(&s3);

int cpid4=fork();

if(cpid4==0){

for(int i4=300;i4<400;i4++){

v4+=a[i4];

}

sum+=v4;

exit(sum);

}

else{

s4=-1;

wait(&s4);

int cpid5=fork();

if(cpid5==0){

for(int i5=400;i5<500;i5++){

v5+=a[i5];

}

sum+=v5;

exit(sum);

}

else{

s5=-1;

wait(&s5);

int cpid6=fork();

if(cpid6==0){

for(int i6=500;i6<600;i6++){

v6+=a[i6];

}

sum+=v6;

exit(sum);

}

else{

s6=-1;

wait(&s6);

int cpid7=fork();

if(cpid7==0){

for(int i7=600;i7<700;i7++){

v7+=a[i7];

}

sum+=v7;

exit(sum);

}

else{

s7=-1;

wait(&s7);

int cpid8=fork();

if(cpid8==0){

for(int i8=700;i8<800;i8++){

v8+=a[i8];

}

sum+=v8;

exit(sum);

}

else{

s8=-1;

wait(&s8);

int cpid9=fork();

if(cpid9==0){

for(int i9=800;i9<900;i9++){

v9+=a[i9];

}

sum+=v9;

exit(sum);

}

else{

s9=-1;

wait(&s9);

for(int i10=900;i10<1000;i10++){

v10+=a[i10];

}

sum+=v10;

}

}

}

}

}

}

}

}

}

printf("Sum = %d",sum);

return 0;

}