HW3

Hyunki Lee

1) Shell

Source Code:

hlee152@gsuad.gsu.edu@snowball:~

```
#1/bin/sh
echo -n "Enter the value of n: "
read number
i=2
count=0
element=2
flag=0

echo -n "First $number prime numbers are: "
while [ $count -lt $number ]
do
i=2
flag=0
while [ $i -lt $element ]
do
if [ `expr $element % $i` -eq 0 ]
then
flag=1
break
fi
i=`expr $i + 1`
done
if [ $flag -ne 1 ]
then
count=`expr $count + 1`
echo -n "$element "
fi
element=`expr $element + 1`
done
echo ""
~
~
```

Output:

```
[hlee152@gsuad.gsu.edu@snowball ~]$ ./prime.sh
Enter the value of n: 3
First 3 prime numbers are: 2 3 5
[hlee152@gsuad.gsu.edu@snowball ~]$ ./prime.sh
Enter the value of n: 6
First 6 prime numbers are: 2 3 5 7 11 13
[hlee152@gsuad.gsu.edu@snowball ~]$
```

2) C

Source Code:


```c
#include<stdio.h>

int prime(int x)
{
for(int i=2;i<x;i++)
{
if(x%i==0)
return 0;
}
return 1;
}
int main()
{
int x=2;
int n;
printf("Enter the value of n: ");
scanf("%d", &n);
if(n<=0)
{
printf("Invalid");
return 1;
}
printf("First %d prime numbers are: ",n);
for(int i=1;i<=n;i++)
{
while(prime(x)==0)
x++;
printf("%d ",x);
x++;
}
return 0;
}
```

Output:

```
[hlee152@gsuad.gsu.edu@snowball ~]$ cc -o prime prime.c -std=c99
[hlee152@gsuad.gsu.edu@snowball ~]$ ./prime
Enter the value of n: 3
First 3 prime numbers are: 2 3 5 [hlee152@gsuad.gsu.edu@snowball ~]$ ./prime
Enter the value of n: 6
First 6 prime numbers are: 2 3 5 7 11 13 [hlee152@gsuad.gsu.edu@snowball ~]$
```